From boatanchors@theporch.com Sat Jan 18 09:34:13 1997
From: jproc@bellglobal.com
Subject: Re: Alaska Steam Co old times
Message-ID: <Chameleon.4.01.2.970117232800.jproc@>

>what's a hetrodyne receiver?

Bobbi,

According to the ARRL Handbook, the heterodyne process is defined as the manner in which CW is detected. In other words, if the source of the locally generated radio frequency is a separate oscillator, the system is known as heterodyne reception. Here, we mix an RF signal whose frequency is slightly below or above the receiver IF frequency and it produces a direct, audio tone. In my books, this is direct conversion, however we might end up playing semantics with the term.

Heterodyne reception was a very popular method in World War 2 ASDIC sets and carried right into sonar. These ASDIC units operated in the 14 to 22 Khz range and the returning echos were mixed with a local AF oscillator to produce a 1 Khz note so the operator could discern a target. This too, is a direct conversion process, however, it is not called by that name.

If the detector is made to oscillate and produce the frequency, the system is known as an 'autodyne' system. This spawns another question for which I have never located a definition. What does the 'super' in superheterodyne mean? Does it simply refer to the fact that that the separate oscillator is operating at a much higher frequency as compared to the oscillator in a heterodyne system?

Regards,

Jerry Proc VE3FAB
E-mail: jproc@bellglobal.com
Radio Restoration Volunteer
HMCS Haida Naval Museum
Toronto, Ontario

From boatanchors@theporch.com Sat Jan 18 09:34:13 1997
From: Bob Roehrig <broehrig@admin.aurora.edu>
Subject: Re: Alaska Steam Co old times
Message-ID: <Pine.ULT.3.95.970117224336.8678B-100000@admin.aurora.edu>

On Fri, 17 Jan 1997 jproc@bellglobal.com wrote:

> heterodyne reception. Here, we mix an RF signal whose frequency is slightly below or above the receiver IF frequency and it produces a direct, audio tone.
>
> range and the returning echos were mixed with a local AF oscillator to produce a 1 Khz note so the operator could discern a target.

This reminds me of another related question that perhaps Bobbi or some other broadcast person can answer. I was thinking of the RCA frequency monitor we had at the last AM station I worked at before I left the BC biz. I recall it having a phone jack on it where one could plug in headphones and get a 1KC tone out of it. Is that how that worked - a xtal osc that was 1KC away from the monitored frequency and the output of the circuit feeding a 1KC discriminator to feed the meter?

I have a 1920's vintage station freq mpnitor in the garage that appears to operate in a similar manner - it's xtal is 1KC higher than the assigned frequency and it has no meter but a phones output. I believe one had to compare the tone output against a tuning fork.

E-mail broehrig@admin.aurora.edu   73 de Bob, K9EUI
CIS: Data / Telecom   Aurora University, Aurora, IL
630-844-4898 Fax 630-844-5530

From boatanchors@theporch.com Sat Jan 18 09:34:13 1997
From: "Roberta J. Barmore" <rbarmore@indy.net>
Subject: Re: Alaska Steam Co old times
Message-ID: <Pine.SUN.3.91.970118091011.17807A-100000@indy1>

Hi, Bob & the group!

I can answer the question about AM BC freq monitors, and yes, they work exactly as Bob suspects--a crystal one kc off the station's freq lived in a *wonderful* oven, with a LF discriminator loooking at the result of beating its output with an RF sample.

...I'm somewhat horrified to admit that I've taken a couple of these apart, 20-odd years ago. The better ones (GR especially) are filled with useful parts, like the forementioned oven (I still have one saved back), good variable condensers, power supply components (those critters used a *lot* of tubes), small UTC varimatch (modulation!) transformers, a nice zero-center meter, etc.

Nowadays, I'd think twice about cannibalizing one, but in the late '70s, AM stations were taking them out and pitching them in the trash, as the requirement to have, maintain and log the output of such a monitor was replaced by weekly or monthly checks with a counter (or whatever--most stations just had the local two-way shop do it from their bench!). So we salavaged them!

Of course, the things always did beg a question: why not just put the high-stability crystal and fancy oven *in* *the* *transmitter?* Most of the classic old-time AM BC rigs didn't have nearly as nice an oven as the freq monitors did!

Modern practice of using high-stability SW rocks and dividing them down to the staton's freq did away with the whole ovens, meters, etc, as a good HC-6 divided by 4 or 6 yields quite good stability over time.

The replies anent heterodyne receivers are quite interesting--I'd known "autodyne" as a synonym for regen set, but had never encountered "heterodyne;" direct conversion seems to have won out in popular useage.

73,
--Bobbi

From boatanchors@theporch.com Sat Jan 18 09:34:13 1997
From: "Walter L. Marshall" <wmarshal@CapAccess.org>
Subject: Re: Alaska Steam Co old times
Message-ID: <Pine.SUN.3.91-FP.970118102154.4802A-100000@cap1.capaccess.org>

Dear Bobbi,
The "super" in superhetrodyne was probably made up by some advertising person. After all, we couldn't have just a plain old hetrodyne. It has to be improved by being called "super".
Walter

From boatanchors@theporch.com Sat Jan 18 14:34:33 1997
From: Ho4bart@aol.com
Subject: Re: Alaska Steam Co old times
Message-ID: <970118111920_374703267@emout14.mail.aol.com>

In a message dated 97-01-17 23:34:05 EST, jproc@bellglobal.com writes:

<< These ASDIC units operated in the 14 to 22 Khz >>

reminded me of 20 years ago working in a surplus store, we had an unused navy sonar set with a long sliderule dial marked in kc/s, a wonderful looking set. but it was way to huge for me at that time. what a shame so many of these beautiful creatures had to become extinct.   also seen: YG beacon xmtr, BN transponder, Navy airborne disc-cutting audio recorder, harbor magnetic detectors!

hue miller

From boatanchors@theporch.com Sat Jan 18 14:34:33 1997
From: vancleef@netcom.com (Henry van Cleef)
Subject: Re: Alaska Steam Co old times
Message-ID: <199701181910.MAA23912@netcom6.netcom.com>

As Walter L. Marshall discourses

>
> Dear Bobbi,
> The "super" in superhetrodyne was probably made up
> by some advertising person. After all, we couldn't
> have just a plain old hetrodyne. It has to be improved
> by being called "super".
>

The "super" has piqued my curiosity for some time, and I have never seen anything that documented why RCA and Armstrong chose it.

Surmise I've heard in the history of technology world is this:

The principle of heterodyning a local oscillator and a received wave was devised by the French during WWI as a passive countermeasures (i.e., listening for German radio transmissions) technique. The French were sure that the Germans had HF capability that the French could not detect with their equipment.

To put this in terms familiar to moderns this is the same as "low oscillator" in a superhet reciever. We are, of course, used to designs that use "high oscillator" or "high beat" (an earlier term), and that of determining whether the oscillator is low or high and image rejection. An oscillator below the frequency of the received signal, passed through a non-linear amplifier, does, as we know, produce a "difference" output frequency, which we can pass through a fixed frequency receiver (IF)---which is what the French did. This took place a good 5-7 years before "superhet" receivers were put in production.

Surmise is that since the original objective was to frequency-shift a high frequency to a lower one, that the "super" refers to the Latin root meaning of the word---"above," "higher"----or, in another English word, "superior."

The RCA original superhet design (Radiola 24/5/8, as I recall---the "catacombs" sets) used a low frequency oscillator, and the second harmonic, for the LO frequency. Thus, the frequency change in the sets was in the same direction as the original French setup---the antenna signal was roughly twice the LO signal.   So I suspect that

the "super" was applied here----and stuck later on, when high
oscillator became common.

--
==
Hank van Cleef
E-mail vancleef@netcom.com or vancleef@tmn.com
==

From boatanchors@theporch.com Sat Jan 18 14:34:33 1997
From: "Walter L. Marshall" <wmarshal@CapAccess.org>
Subject: Re: Alaska Steam Co old times
Message-ID: <Pine.SUN.3.91-FP.970118152518.29934A-100000@cap1.capaccess.org>

   Dear Hank,
   OK. So why don't they call radios that use low end
injection, subhetrodyne?
             Walter

From boatanchors@theporch.com Sat Jan 18 14:34:33 1997
From: jproc@bellglobal.com
Subject: Re: Alaska Steam Co old times
Message-ID: <Chameleon.4.01.2.970118152546.jproc@>

Dear Ba'ers,

I may have answered my own question as to the meaning of 'super' in superheterodyne. The clue came from the least likely source - the ordinary dictionary.

Let's review the process again. When two different RF frequencies are introduced into an non-linear device such as a mixer, there will be four products present at the output:

1) The original input frequency (f in).
2) The oscillator frequency   (f osc)
3) The sum of Fin and Fosc.
4) The difference of Fin and Fosc.

In the heterodyne receiver or process, we can choose the sum (#3) or the difference (#4) as the useful product but the other two (#1 and #2) will be present to some degree and will passed on to the next stage. Depending upon the function of the next stage, this could or could not be problematic.

In the superheterodyne receiver, we generally choose the difference signal and send it to a tuned, IF amplifier. This stage will severly attenuate the other three components and is the net effect is called 'image rejection'. It is likely the addition of the IF stage(s) after the initial heterodyning process (mixer/osc) which gives the system the prefix of 'super'. That's how I see it anyway.

Everyone agree?

Regards,

Jerry Proc VE3FAB
E-mail: jproc@bellglobal.com
Radio Restoration Volunteer
HMCS Haida Naval Museum
Toronto, Ontario

From boatanchors@theporch.com Sat Jan 18 20:15:50 1997
From: rs@ham.island.net (Robert Smits)
Subject: Re: Alaska Steam Co old times
Message-ID: <011897140221Rnf0.79b6@ham.island.net>

"Walter L. Marshall" <wmarshal@CapAccess.org> writes:

>   Dear Bobbi,
>   The "super" in superhetrodyne was probably made up
>by some advertising person. After all, we couldn't
>have just a plain old hetrodyne. It has to be improved
>by being called "super".
>   Walter

>From my old copy of Applied Electronics.....

"The process of mixing or combining two waves of different frequencies to produce a new frequency is called BEATING or HETERODYNING. Usually the heterodyning is done to produce a new frequency equal to the difference of the two input frequencies. In this case, the beat frequency is lower than the original frequencies. For example, when an r-f carrier wave at 1000 kc is heterodyned with the oscillator output at 1,455 kc the difference is 455 kc. This is the intermediate frequency. The term SUPERHETERODYNE applies here because the difference frequency is super-audible, or above the a-f range."

73, Bob, VE7HS

--
rs@ham.island.net

From boatanchors@theporch.com Sat Jan 18 14:34:33 1997
From: BEN NOCK <106312.1035@compuserve.com>
Subject: Anson aircraft radio
Message-ID: <199701181358_MC2-F91-585C@compuserve.com>

Re the radios fitted to Ansons.

Early ones would have been R1082/T1083,

Later ones used R1155/T1154.

Ben G4BXD

MILITARY WIRELESS IN THE MIDLANDS
HOME OF BRITISH MILITARY RADIO

From boatanchors@theporch.com Sat Jan 18 09:34:13 1997
From: arc5@ix.netcom.com (David Stinson)
Subject: ARC-5 and SCR-274N Manuf. Types
Message-ID: <199701181523.HAA26548@dfw-ix12.ix.netcom.com>

(Copied to the mailing lists for general information)

--------------------snip----------------------
might take a little time as I get
"five minites here, five minutes there"
to work on radio these days.

There are actually several models of "ARC-5"
or SCR-274N HF equipment. Here they are from
earliest to latest, as best my research can discover:

Aircraft Radio Corp. Navy, ARA(rcvrs) and ATA (xmtrs),
1st generation. Accepted 1939, entered service in 1940.
Black paint, blue nomen plate on top.
No tuning instruction plate on front.
Accessories rare. 7-9 MC transmitter rarest.
Subcontracts by Stromberg Carlson.

Aircraft Radio Corp. Army, early 1st-run SCR-274N.
Part of the first production order.
Black paint, black-and-silver nomen plate on top marked "Aircraft Radio Corp." You can spot one by the "home-made" capacitor in the oscillator circuit, which was made with wafers of alternate mica and aluminum with a screw and bolt holding them together. They adjusted the screw tension to get the exact required value, then glued it down.
Also had two turns in the link output on 3-4 and 4-5.3 units rather then the four turns of later models.
Takes a "Mike Hanz-style" Unun transformer to tune these to full output into a 50-ohm antenna.
Rare.

Western Electric 1st run Army SCR-274N.
Black paint, black-and-silver plate on top cover with WE logo in italics. My complete 2x3 274N is this set, just because it looks sharp. :->
Tougher to find.

Western Electric 2nd run Army SCR-274N.
Black paint, black-and-silver plate on side.
Fairly Common.

Western Electric Army SCR-274N.
No paint. Black and silver plates on the side.
Most common type set.
BC-453s of this type most common of all command sets (total of 400,000 453s made).
Subcontracts by Colonial Electric.

Aircraft Radio Corp. Navy, ARA(rcvrs) and ATA (xmtrs)
2nd generation. Black paint, blue plate on top and red tuning plate on the bottom left of the front panel.
You can spot them by the red tuning plate and the "snap slide" front window.
Uncommon.

Aircraft Radio Corp. Navy AN/ARC-5. Black paint,
Blue plate on top with "R-" and "T-" model numbers.
Blue tuning plate on bottom left of front panel.
Improved design with shunt-feed pa plate and stability improvements. "Screw-on" front window.
Units from very common (R-23) to very rare (T-15, T-90).
Subcontracts by Stromberg Carlson.

Aircraft Radio Corp. Navy, ARA(rcvrs) and ATA (xmtrs)

3rd generation. Black paint, blue plate on top and
red tuning plate on the bottom left of the front panel.
Unlike the 2nd gen. units, these were built in the
more modern "AN/ARC-5" cabinet style with the
"screwed-on" tuning coil window, but still had the
direct PA voltage feed. Built as replacements for
existing ATA/ARA installations.
Rare.
---------------------------snip---------------------------

I sure don't know everything and there were small runs,
prototypes and etc, like the "Korea" run of 453s by manuf.
"CLP" (Lowell? I forget). I haven't discovered them all,
but the ARC corp. records are archived in Maryland so maybe
some day when the kids are grown and
the job travel requirements let up... :-)

If anyone has additions or corrections, I'd sure like
to hear about them.

73 DE Dave Stinson AB5S
arc5@ix.netcom.com

From boatanchors@theporch.com Sat Jan 18 14:34:33 1997
From: Ho4bart@aol.com
Subject: Re: ARC-5 and SCR-274N Manuf. Types
Message-ID: <970118114933_1577575652@emout07.mail.aol.com>

In a message dated 97-01-18 10:26:36 EST, arc5@ix.netcom.com (David Stinson)
writes:

<< but the ARC corp. records are archived in Maryland so maybe
some day when the kids are grown and
the job travel requirements let up... :-) >>

thank you for sharing this precious info with us!
and.....gordon elliot white's   massive "command set" collection, it
went to the Smithsonian, right?   (damn shame, in my <opinion>)
hue miller

From boatanchors@theporch.com Sat Jan 18 20:15:50 1997
From: arc5@ix.netcom.com (David Stinson)
Subject: Re: ARC-5 and SCR-274N Manuf. Types

Message-ID: <199701182240.OAA18721@dfw-ix10.ix.netcom.com>

.gordon elliot white's massive "command set" collection, it
>went to the Smithsonian, right? (damn shame, in my <opinion>)
>hue miller

Yes, I'm afraid it did. In the Smithsonian's liberal
"anti-war" mood, they're likely to throw them in the dump.
Did you know the Smithsonian is planning to discard all
"war-glorifying" displays? You gotta love the latest crop
of disgusting academic crybabies.
Too bad they're in charge, huh?

(73 DE Dave Stinson AB5S

From boatanchors@theporch.com Sat Jan 18 20:15:50 1997
From: Mike Sullivan <michaels@kc2kj.k2nesoft.com>
Subject: Re: ARC-5 and SCR-274N Manuf. Types
Message-ID: <32E15EAE.54A67041@kc2kj.k2nesoft.com>

David Stinson wrote:
>..... In the Smithsonian's liberal
> "anti-war" mood, they're likely to throw them in the dump.
> Did you know the Smithsonian is planning to discard all
> "war-glorifying" displays? You gotta love the latest crop
> of disgusting academic crybabies.
> Too bad they're in charge, huh?
>

What is most disturbing is that war seems to bring out both the best and
the worst of our race.....

Mike

From boatanchors@theporch.com Sat Jan 18 20:15:50 1997
From: Karan Lee Carruth <klccarru@tenet.edu>
Subject: Re: ARC-5 and SCR-274N Manuf. Types
Message-ID: <Pine.OSF.3.91.970118190917.30037A-100000@francis.tenet.edu>

On Sat, 18 Jan 1997, David Stinson wrote:

> Yes, I'm afraid it did. In the Smithsonian's liberal
> "anti-war" mood, they're likely to throw them in the dump.

> Did you know the Smithsonian is planning to discard all
> "war-glorifying" displays? You gotta love the latest crop
> of disgusting academic crybabies.
> Too bad they're in charge, huh?

If you raise enough cain with your congressman and senators this can be changed. Sam Johnson of Texas was very instrumental in getting the Enola Gay exhibit changed.

If you are interested enough to write about it on this list you can also write your elected representatives.

It can be done.

Lenox, WA5OVG

From boatanchors@theporch.com Sat Jan 18 14:34:33 1997
From: Ho4bart@aol.com
Subject: ART-13 ACPS, what was its nomenclature?
Message-ID: <970118113420_1476916545@emout20.mail.aol.com>

In a message dated 97-01-18 08:20:33 EST, WSNO19 writes:

<< It lloks like the RA-??..the AC PSU for the SCR-522..only bigger! There is a Stewart Warner name on it on one tag and the other has the MIL REF...I need to re-chase this one up again. Maybe you have some info in (a) Your memory? (b) a MIL HBK? (c) own one?...your input on this one would be good! >>

tony grogan asked me this question. anyone know this? it sounds like he means a different animal from the gray one that sits below the xmtr in the shipboard configuration.   hue miller
----
Forwarded message:
Subj: '348ism

From boatanchors@theporch.com Sat Jan 18 20:15:50 1997
From: wallace@world.std.com (Andy Wallace)
Subject: BA Sighting: ROBOT MONSTER (1953)
Message-ID: <32e26d3b.13524402@world.std.com>

This thing makes PLAN 9 FROM OUTER SPACE look like CITIZEN KANE. The "monster" is a guy in a gorilla suit with a space helmet. It just gets worse from there...

Sighted: what looks to me like a WW1 piece of radio gear I once saw. Two large metal disc dials with straight bar pointers (like old old old Halli receivers or some GenRad equipment) and one meter on the lower right front panel. Sure looks like radio gear. Marconi? In 1953 that stuff would have been just "old junk" and probably available from any B-movie prop department.

Also in this mix of robod destructo-stuff (on a card table in a cave, no less) is what looks like a Hallicrafters S-53 receiver. It took me a minute to recognize it because it was UPSIDE DOWN.

Somehow, soap bubbles are a major part of the Robot's plot to destroy Earth.

73,
--Andy
wallace@world.std.com
http://www.mindspring.com/~johnmb/ka1gtt1.htm
(Vacuum tube ham stuff...comments appreciated!)

From boatanchors@theporch.com Sat Jan 18 14:34:33 1997
From: "Richard L. Duell" <rduell@iac.net>
Subject: Bliley CF-1
Message-ID: <2.2.32.19970118111702.00753c28@mail.iac.net>

I recently decided to start a collection of crystal holders. It's amazing how many different variants there have been.

Anyway, as I was rooting through the box I've storing them in, I discovered one of them is actually a crystal filter. It's by Bliley and the model is CF-1 with a frequency of 465 kc. I don't remember where I got it, but I'm sure I didn't pull it from anything.

Anyone have the specs on this or know of any equipment it was used in? It's form factor is similar to one of the larger two pin holders.

73, Rich - W5VDU

From boatanchors@theporch.com Sat Jan 18 09:34:13 1997
From: Mike Toneri <toneri@ils.net>
Subject: Re: Bring gear across US/CANADA border
Message-ID: <199701180423.XAA20524@server1.ils.net>

At 02:49 PM 1/17/97 -0600, w2ec@VNET.IBM.COM wrote:
>I'm driving to Canada tomorrow to pick up a BA receiver. Anyone had
>any experience with importing BA gear (50-60 years old)? Wondering what duty

>they'll hit me with when I bring it back across the border.
>
>73, Ray W2EC

There is no duty on amatuer radio equipment. It was eliminated many years ago.
73...Mike VE3FGU

****
Mike & Lynda Toneri   E-mail: toneri@ils.net
****

From boatanchors@theporch.com Sat Jan 18 09:34:13 1997
From: Hal Waite <halwaite@sprintmail.com>
Subject: Re: Bring gear across US/CANADA border
Message-ID: <32E05295.F47@sprintmail.com>

w2ec@vnet.ibm.com wrote:
>
> I'm driving to Canada tomorrow to pick up a BA receiver. Anyone had
> any experience with importing BA gear (50-60 years old)? Wondering what duty
> they'll hit me with when I bring it back across the border.
>
> 73, Ray W2EC

How can there be a problem if the BA gear shows an American
manufacturer?

From boatanchors@theporch.com Sat Jan 18 14:34:33 1997
From: jcall@sirius.com (Jim Carrington)
Subject: Re: Can anyone ID this?
Message-ID: <199701181747.JAA25124@mail1.sirius.com>

>Chris KO4QW wrote:
>
>ªI found the following piece advertised at auction and it doesn't appear in
>ªthe RCVR'S PAST and PRESENT book. Does anyone recognize this radio by the
>ªdescription?
>ª
>ª"OLD HAM RECEIVER IN EXC WORKING CONDITION STAR
>ªCOMPANY LTD,MODEL SR-700A-
snip

This receiver is in the new 2cnd edition of "SW Radios Past and Present" but
in the back section p349. I lists it as made by "Star-line" of Japan and

was a triple conversion 75m-10m ham band only radio . It was made from 1966-1968 and sold for $395 new. The photo of the front panel, to me looks like on first glance like an HW101 Heath transceiver.

73s
Jim Carrington

From boatanchors@theporch.com Sat Jan 18 09:34:13 1997
From: Mike Maloney <ac5p@ionet.net>
Subject: RE:Finding EFJ Maroon Paint
Message-ID: <199701181440.IAA27475@mail.ionet.net>

Have seen a couple posts very recent on this subject. The larger automotive supply stores that handle paint can computer match the Maroon from a good sample. Only problem is, they may only mix a gallon minimum which is probably enough to do a couple dozen cases. A Sherwin Williams paint store can custom mix a quart of enamal for about $10. There are larger paint supply stores that will put the paint in spray cans, or you can buy a bottle and spray cartridge from the aforementioned automotive supply and mix per the instructions with the spray kit. I believe it is 3 parts thinner to 1 part paint. The secret is getting the case cleaned and preped properly before spraying. Apply several light coats with time inbetween rather than one heavy coat.
73/Mike   ac5p@ionet.net

From boatanchors@theporch.com Sat Jan 18 09:34:13 1997
From: Bill Meara <wmeara@erols.com>
Subject: FROSTFEST BA JUNQUE XCHANGE
Message-ID: <199701181431.JAA24125@mx03.erols.com>

Junquemeisters:

I'll be down in Richmond for Frostfest tomorrow and am looking forward to meeting members of the BA gang. Maybe it would be a good idea to post some "I need..." messages today so that we could exchange junque tomorrow.

I'm looking for a manual for a Heath Benton Harbor Lunchbox Sixer.

I also could use a manual for an Eico 435 'scope (much reviled recently!) and one for an Eico 322 Sig generator.

Could also use a mike for the lunchboxes, a scope probe for the Eico, a box suitable for mounting a variac.... oh yea and a mint KWM-2A that somebody is willing to donate! :-)

Mi junque box es tu junque box!

I'll be wearing an AMSAT call sign badge (sort of a disguise for an Anchorologist!)

See you there. Dress for frost!

73 De N2CQR
Bill Meara
Hallicrafters, Heaths and Hammarlunds
QTH: Falls Church, Virginia, USA
Formerly of Tegucigalpa, Bilbao and Santo Domingo
wmeara@erols.com

From boatanchors@theporch.com Sat Jan 18 14:34:33 1997
From: "David M. Nance" <dmnance@roanoke.infi.net>
Subject: Re: FROSTFEST BA JUNQUE XCHANGE
Message-ID: <32E1361A.27D1@roanoke.infi.net>

Bill Meara wrote:
>
> Junquemeisters:
>
> I'll be down in Richmond for Frostfest tomorrow and am looking forward to
> meeting members of the BA gang. Maybe it would be a good idea to post some
> "I need..." messages today so that we could exchange junque tomorrow.
> I'm also going to Frostfest and will be looking for good B/A signal
generator such as a URM-25D or an HP606.

Would also like to find a ZM-11 Test Set.

I totally lose control at these events so it's no telling what I'll bring back.

David - WB4SSE

From boatanchors@theporch.com Sat Jan 18 20:15:50 1997
From: joelutz@juno.com (Joseph W Lutz)
Subject: Re: FROSTFEST BA JUNQUE XCHANGE
Message-ID: <19970119.003804.2870.0.JOELUTZ@juno.com>

Bill & Fellow Junquemeisters,

Will be looking forward in meeting you Bill - haven't had chance to

drop by for that cuppa yet. I also will be getting up early and driving down to the Frostfest - just hope I don't get lost. Will be going down primarily 'just to look' - but you know what can happen. David put it so well - ' I also lose control'. If anyone going down there needs/wants either 8122 or 4CX1500B tubes, I will throw a box in the Blazer and maybe we can work out a deal. Bundle up - it surely wont be like Tegu!
73 de JOE
- - - - - - - - - - - - - - - - -W7LPF/4 (NNN0KUU)- - - - - - - - - - - - - - -
QWCA - NCVA - SOWP - FISTS
Gordonsville, Va 22942 (Orange County)
WTB: EFJ Adventurer, Hallicrafter HT32
- -

From boatanchors@theporch.com Sat Jan 18 09:34:13 1997
From: "Jim Berry" <basalop@eskimo.com>
Subject: Re: FS CAY-TBM 10, BIG BA
Message-ID: <199701180913.BAA10109@mail.eskimo.com>

>
> For sale a CAY-TBM 10 transmitter..
> Only 5 known to exist, 3 of which are in museums.
> Uses (3) 860's to drive an 861 final. This is CW, only one of the modulators

Bring back memories. Early 60's when I was in high school, living in Portland Or, used to visit a ship wrecker known as Zidell Exploration. They had rows of TBM's. They wanted 5 cents a pound for the things, all or part. Everyone was parted out. 800 lbs x $.05 was way to much for my blood in those days. We used to have 860 "wars" by throwing the things at each other. Not even going to ask what that fella is going to get for the TBM he has.

73 Jim K7SLI

From boatanchors@theporch.com Sat Jan 18 14:34:33 1997
From: Ho4bart@aol.com
Subject: Re: FS CAY-TBM 10, BIG BA
Message-ID: <970118114351_471072470@emout08.mail.aol.com>

In a message dated 97-01-18 09:24:10 EST, basalop@eskimo.com (Jim Berry) writes:

<< Early 60's when I was in high school, living in

Portland Or, used to visit a ship wrecker known as Zidell
Exploration. >>
yes, my friend John Nelson scrounged many a rbc and tcs there.
god, what glory days! i could have gotten me a TBS, even !
hue miller

From boatanchors@theporch.com Sat Jan 18 20:15:50 1997
From: J P Taillebois <jpt1@idirect.com>
Subject: FS/hawkins practical library of electricity circ.1922
Message-ID: <199701182347.SAA20173@nemesis.idirect.com>

hi, everyone

I have 9 of the 10 pocket books of hawkins. book number 9 is missing.

All books are complete inside. no tears no missing pages. Covers ok but are
70 years old.

Any interest make me an offer...

73
Jean Paul Taillebois 996 Greenlane court, Oshawa, Ontario,Canada M1K-2C6
e.mail jpt1@idirect.com
packet: ve3jpt@va3vw
voice:905-723-1811
fax/data:905 723-9156
Collector: Hallicrafters,Central-Electronic,Gonset, Military BA, antique
radio memorabilia.

From boatanchors@theporch.com Sat Jan 18 14:34:33 1997
From: JRininger@aol.com
Subject: FS: Boatanchor Plug-in Caps
Message-ID: <970118114230_781945537@emout19.mail.aol.com>

I have twelve Aerovox AEP88J plug-in "octal"
caps for sale. Pin 1 is neg., pins 3 and 5 are
each 40 mfd at 450 vdc.

These are NOS; I had to buy a box of them
to get the 4 that I needed.

I will sell them as one lot for $60 plus shipping;
$20 less than what I paid for the box of 16.

Please Email if interested.

From boatanchors@theporch.com Sat Jan 18 14:34:33 1997
From: JRininger@aol.com
Subject: FS: R392 Parts Unit - $75
Message-ID: <970118102641_1344330656@emout03.mail.aol.com>

I have an R392 for sale. It has no case, but is otherwise complete; since I haven't personally operated it, I will sell it as a "parts unit."

Price is $75 plus shipping from zip 93430. I also have some sort of cobbed-up power supply that I will throw in for nothing if you want to pay the shipping.

73,
Jeff N6MNI

From boatanchors@theporch.com Sat Jan 18 09:34:13 1997
From: Richard Hager <rhager@millcomm.com>
Subject: HELP with ATTEN specs
Message-ID: <32E056FB.5BC@millcomm.com>

Hi guys and gal,

I could really use some help on this one. I'm in need of a decent step atten for the bench. I've had a real BA one offered to me, but seller doesn't have specs. As it's a fair chunk of change, I want to be sure of it before biting on it.

Can any of you -confirm- the freq capability of this unit? Like the range within which it's very flat, .25 or 1db, and the 'usable' range (usually spec'd as within 2-3 db) ?? I'd really appreciate it.

This thing weighs 35 lbs!! Geez, I used a Kay atten for a while and it weighed about a pound. What the heck is in this Weinschel that would weigh 35 lbs? Silver you think? hee hee... probably more like -oak- !!

>> >> WEINSCHEL ENGINEERING 70 - Precision StepAttenuator
>> >> Two drums, 0-60 dB in 1 dB steps. 4 watts maximum
>> >> power, 50 Ohms impedance. N connectors.

Please reply to my email as well, in case I miss the list traffic.

```
Thanks very much!

Richard

--

        Richard Hager

+ Ah-ha! Design Group, Inc.           -
+ Precision CNC Technology, since 1991  -
+ 612-641-1797, Fax: 612-641-8681         -
+ "I just like to make things" So...         -
+ ...please call Ah-ha! directly for CNC info    -
+ http://www.millcomm.com/~ahha  email: ahha@millcomm.com -


From boatanchors@theporch.com  Sat Jan 18 09:34:13 1997
From: Jim Garland W8ZR <4CX250B@miavx1.acs.muohio.edu>
Subject: Re: HELP with ATTEN specs
Message-ID: <v03007804af066b41c9ba@[134.53.65.12]>

>
>>> >> WEINSCHEL ENGINEERING 70 - Precision StepAttenuator
>>> >> Two drums, 0-60 dB in 1 dB steps. 4 watts maximum
>>> >> power, 50 Ohms impedance.  N connectors.
>
>Please reply to my email as well, in case I miss the list traffic.
>
>Thanks very much!
>
>Richard
>

You're lucky, Richard, as long as you have the space on your workbench for
the monster. My Kay attenuator only has 1/2 watt rating, and l live in fear
of zapping it. Try checking it's freq. dependence with a signal generator
and a 50 ohm load.
Jim W8ZR





From boatanchors@theporch.com  Sat Jan 18 20:15:50 1997
From: merrigan@ee.ualberta.ca
Subject: High Quality Manuals: R-389
Message-ID: <199701190124.TAA14206@uro.theporch.com>
```

Well, after quite a bit of effort, the R-389 manual is ready. Thanks to everyone who responded to my questions, and helped me out.   So my list of HQ manuals is now as follows:

Hammarlund SP-600J/JX Operator's manual
Hammarlund HC-10 Converter manual
Hammarlund HQ-180 manual
Hammarlund HQ-180A manual
Hammarlund HQ-145A manual
Hallicrafters SX-101A manual
Hallicrafters SX-117 manual
R390A Operator's manual TM 11-5820-358-10
R389 Manual TM 11-855/TO 31R1-2URR-161

The paper quality, binding choices, and production methods I use make my manuals better than the originals in many ways (particularly for the large TM manuals)

As usual, email for specific information; the R-389 manual in particular has several different configurations available.

Shaun

--
----
merrigan@nyquist.ee.ualberta.ca
Electrical Engineering Student
University of Alberta
Edmonton, Alberta, Canada

"Do you guys know what a switch is ?"

-EE professor (Introductory Microprocessors) after
observing dumbfounded looks

From boatanchors@theporch.com Sat Jan 18 14:34:33 1997
From: "August H. Johnson" <kg7bz@whitemtns.com>
Subject: HQ-160 manual wanted
Message-ID: <32E0E956.3E53@whitemtns.com>

Hi all,

Now that I've got the HQ-160 back that I'd given away 12 years ago, I'd like to see if I can find a manual to make the tune-up easier. Are there any floating around out there?

73,
August
--
August Johnson KG7BZ   AMI 733   http://www.whitemtns.com/~kg7bz
P.O. Box 795   mailto:kg7bz@whitemtns.com
Pinetop, AZ 85935

From boatanchors@theporch.com Sat Jan 18 14:34:33 1997
From: midshires@cix.compulink.co.uk (Andrew Emmerson)
Subject: Re: Invention That Changed The World
Message-ID: <memo.467754@cix.compulink.co.uk>

I haven't read this book so perhaps I shouldn't comment... but I will.

How on earth in this enlightened day and age of scholarship can someone choose a title such as
>(How a small group of radar pioneers won the second world war and launched a technological revolution).

>The book starts more or less with the visit of the Tizzard Mission to the US in 1940, continues with the establishment of the MIT RadLab, and the subsequent development of the first succesful radar systems (the SCR-584 gun laying radar among them).

First successful radar system? Good grief! How insular!

Just about every competent historian now accepts that the Germans had radar systems that were every bit as viable as the Allies'. To put out this kind of jingoistic crap really does the author and publisher little credit.

Anyway, everyone knows it wasn't radar that won the war, it was the Allied breaking the German and Japanese codes. Or else it was....

Perhaps I should 'lighten up' but any book that sells itself in this kind of way is of marginal value; it cannot present a balanced view. Having read the book 'Tube' in the same series, I am not encouraged. Whilst the latter is a rattling good read, it is largely 'faction' -- far too much dramatisation and far too little genuine primary research. It is also highly selective and virtually ignores development work going on outside the USA. It appears to be based entirely on secondary research

done by others, so it doesn't add any value, merely repeats previous
mistakes. Compare it with Abramson's book on television; at least
Abramson goes to primary sources and gives chapter and verse of each
quote to back up his assertions. 'Tube' is all from secondary sources,
some of which are inevitably wrong.

My view is there are plenty of books out there already and there's little
point in adding to them unless you have something new or better to say.
Accuracy _is_ important and so is presenting a complete, balanced view.

Andy, G8PTH.

From boatanchors@theporch.com Sat Jan 18 14:34:33 1997
From: Sandy W5TVW <ebjr@worldnet.att.net>
Subject: Re: Invention That Changed The World
Message-ID: <19970118185028.AAC25578@LOCALNAME>

At 05:23 PM 1/18/97 +0000, you wrote:
>I haven't read this book so perhaps I shouldn't comment... but I will.
>
>How on earth in this enlightened day and age of scholarship can someone
>choose a title such as
>>(How a small group of radar pioneers won the second world war and
>launched a technological revolution).
>

For all that want to read a really good book about radar, look for
"The Bruneval Raid" by George Millar. Excellent account of some of the
early radar events and also what countermeasures were being taken in the
development of fire control radar equipment.
73,
E. V. Sandy Blaize, W5TVW
"Boat Anchors collected, restored, repaired, traded and used!"
417 Ridgewood Drive,
Metairie, LA., 70001
ebjr@worldnet.att.net
Looking for: Hallicrafters SR-75, 860 tubes
Butternut HV2V antenna, G-R test gear....................*

From boatanchors@theporch.com Sat Jan 18 20:15:50 1997
From: Jack Harper <jharper@bs2000.com>
Subject: Re: Invention That Changed The World
Message-ID: <199701182056.NAA10525@lynx.csn.net>

At 11:21 1/18/97 -0600, Andy, G8PTH wrote:

>I haven't read this book so perhaps I shouldn't comment... but I will.
>
><snip>
>
>>The book starts more or less with the visit of the Tizzard Mission to the US in 1940, continues with the establishment of the MIT RadLab, and the subsequent development of the first succesful radar systems (the SCR-584 gun laying radar among them).
>
>First successful radar system? Good grief! How insular!
>
>Just about every competent historian now accepts that the Germans had radar systems that were every bit as viable as the Allies'. To put out this kind of jingoistic crap really does the author and publisher little credit.

I disagree with this -- my understanding is that the Germans and Japanese had radar, of course, but it operated at comparitively much much longer wavelengths (meters -vs- a couple of cm) and with far less power (none of the Axis powers actually got Magnetrons -- or anything remotely with their capabilities -- into production before the end of the war even though, relatively late in the war, the Germans knew what they were and how they worked from samples salvaged from shot-down aircraft). Point is -- the Axis radars were very very inferior due to their long operating wavelengths (low resolution) and low power and contributed practically nothing of military significance to the Germans with the exception of sometimes warning of approaching air raids...

Perhaps you could give an example of a German radar system that was 'up to snuff' for the period and that was miliarily useful (not being sarcastic -- just don't know). I think that the Allied bombing raids would have had a very different outcome if the Germans had had anything like the SCR-584 radar directed antiaircraft gun -- but they didn't. Their primitive radar could see the Allies coming -- but were of no help in shooting them down...

>
>Anyway, everyone knows it wasn't radar that won the war, it was the Allied breaking the German and Japanese codes. Or else it was....

Agreed. In the book, the author makes his case that "while radar won the war, the bomb ended it" -- which I would tend to almost agree with in the sense that the Germans were, of course, already defeated by summer 1945 and, while the Japanese were clearly prepared to wage an incredibly nasty end game, they were, for all intents, already defeated -- just a matter of time and enormous casualties on both sides (mostly Allied military and about 10x Japanese civilians who were to fight with hands, spears, etc). I agree with the statement that "the bomb did not win the war -- it ended the war". I do not agree that "radar won the war".

It is obviously impossible to say that one factor 'won the war' -- but radar clearly was an enormous asset that the Axis did not match ("did not" not "could not")-- e.g., in anti-submarine warfare that kept the convoys going to Europe (the Axis U-boat threat began to really disappear when the Allies finally began to direct airbourne radar against them in, I think, late '43 early '44); proximity fuses; and general naval warfare (the Japanese/Germans had very few ship-based radars -- one major reason that the German 'Bismark(sp?)' was sunk was because it could not shake the British radar during the chase). In the Battle of Midway, Allied carriers 'saw' (with cm ship-based radar) the approaching Japanese planes and had plenty of warning -- the Japanese carriers could not 'see' the approaching Allied planes until the last minute... ad. infinitum...

I obviously agree that ULTRA/Enigma et. al. (and the corresponding broken Japanese codes (MAGIC and PURPLE if I recall correctly -- have to check)) were of enormous importance -- I think of more importance than radar. Radar helped the Allies fight tactically -- but ULTRA told the Allies what the Axis was thinking and what their weaknesses were... But then, I am hopelessly biased as I make my living building crypto based systems.

Perhaps Eisenhower had it most right in his first memoirs -- "Dedicated to the Allied Foot Soldier"....

>
\>My view is there are plenty of books out there already and there's little
\>point in adding to them unless you have something new or better to say.
\>Accuracy _is_ important and so is presenting a complete, balanced view.
>
\>Andy, G8PTH.
>
>

Agreed! However -- I enjoyed the book and found no obvious errors and heartily recommend it for people interested in a concise history of the development of radar/microwaves in, especially, the 1930-1950 or so era... I did, however, find that the book slowed down for me after about 1950 (last 1/3) -- but that is probably because my historical interest wains at about that point.

Regards to all... (Jack -- Pls forgive the bandwidth -- no more on this from me)

Jack, KC0LR (Friend to all things Hammarlund)

```
------------------------------------------------------------------
Jack Harper                             Bank Systems 2000, Inc.
e-mail: jharper@bs2000.com              350 Indiana Street, Suite 800
voice:  303-277-1892 fax: 303-277-1785  Golden, Colorado 80401 USA
```

"21st Century Financial Applications"
Optical Cards for Bank, EBT, and Medical Applications
Visit our Web Page: http://www.bs2000.com/talos (Last Update: 960926)

1024-bit PGP crypto key with ID: 8FB07075 created 960728
Fingerprint: 75 DA 06 35 F8 3D AC EC 3A F2 7C 59 A1 11 A5 74
Key available from Public Key Servers and above Web Page

From boatanchors@theporch.com Sat Jan 18 20:15:50 1997
From: jproc@bellglobal.com
Subject: Re: Invention That Changed The World
Message-ID: <Chameleon.4.01.2.970118204458.jproc@>

>none of the Axis powers actually got Magnetrons.

No!

The cavity magnetron made its first appearance in the British H2S set which was fitted aboard large aircraft such as the Lancaster. The British were so concerned about the cavity magnetron falling into German hands, that they initially limited the use of H2S sets over their own country. Eventually, it was difficult to dismiss the fact that H2S radar was invaluable to 'pathfinders', those highly trained and specialized airmen who accurately marked the bombing drop zone for the remainder of the aircraft behind them. Eventually, a decision was made by Bomber Command to use the H2S over Germany with its attendent risks.

H2S sets were equipped with destruct charges to prevent the sets from falling into enemy hands. The idea was great in principle, however a very basic fact of metallurgy had been overlooked. If an aircraft was mortally wounded and on its way down, the radar operator could flip the destruct switch on the H2S. The explosive would do its job on the set but it was virtually impossible to destroy the machined block of alloyed metal internal to the magnetron.

The magnetron finally got into German hands in 1943, but it did not help their radar effort in a meaningful way. A substantial output of the German radar industry was devoted largely to fend off the Allied bomber offensive.

>>Anyway, everyone knows it wasn't radar that won the war, it was the
>>Allied breaking the German and Japanese codes.

The war was won as a result of overall effort based on brain power the will of a nation and scientific breakthroughs. If I was asked to rate an particular aspect which helped top win the war it would definitely be codebreaking.

Hey, all this WW2 radio related discussion is great! This is Boatanchors at its finest hour:-)

Regards,

Jerry Proc VE3FAB
E-mail: jproc@bellglobal.com
Radio Restoration Volunteer
HMCS Haida Naval Museum
Toronto, Ontario

From boatanchors@theporch.com Sat Jan 18 09:34:13 1997
From: Allen Tucholski <allent@en.com>
Subject: Johnson maroon paint, what should I use?
Message-ID: <1.5.4.16.19970118082148.2b476958@en.com>

Hello all,

I have several Jonson 6N2's and a Viking Challenger the need the cabinets repainted.
Question, are there any car color paints that match close to that original maroon color.
What do you guys in BA land use to completely repaint Johnson Rigs?

Allen

NASA Lewis Reasearch Center
Cleveland, Ohio

From boatanchors@theporch.com Sat Jan 18 14:34:33 1997
From: Bob Lucas <boblucas@netins.net>
Subject: Lear rcvr FS
Message-ID: <199701181930.NAA20393@ins6.netins.net>

Lear Orienter reciever, I have no idea if it works, from an estate. Anyone ever heard of it? Gray case. dial, meter. Covers "200-1750" khz??? in 3 bands.
While not a "BOATanchor", it does have tubes, hi

Trade for...Heath sixer, ? or other BH lunchbox? Sixer preferred... 73 Bob

From boatanchors@theporch.com Sat Jan 18 20:15:50 1997
From: don merz <71333.144@CompuServe.COM>
Subject: Military Gear FS
Message-ID: <970118222024_71333.144_DHB35-2@CompuServe.COM>

For Sale

CONTACT: Don Merz, N3RHT: 47 Hazel Drive, Pittsburgh, PA 15228.
412-234-8819 (weekdays, EST or leave a message anytime).
71333.144@compuserve.com
Offers Welcome.

Military T-195 transmitter. Korean-war era companion to the R-392 receiver. HF TX that is built like a tank. Nice outside, all original. Like new inside. Complete. Untested. $150

Military (National) RBL-5 WWII-era Navy VLF receiver. The nomenclature tags have been removed. This has some small paint chips and rust spots but should clean up well. Celluloid dial "glass" has shrunken and become distorted--that will need replacing. Some of the control ID tags have a weathered appearance. Complete. All original. As-is. $45

Military (National) RBL-6 WWII era Navy VLF receiver. This is the rackmount version of this set designed for a non-standard National rack. Really fine shape inside and out. It is in a cabinet that is not original but fits nicely. Otherwise all original. Complete. Working well. $75

Military BC-640 VHF transmitter. WWII-era VHF ground station designed for AM operation around 135 mc. 6-foot tall rack with 7 separate chassis including amplifier, oscillator, modulator, control, 2 power supplies and power control. Made by Bendix Radio for the Canadian military and has all the Canadian tags all over it. I was told this was in use as recently as 15 years ago at the Wheeling, West Virginia Airport. It is all original and complete except for some missing tubes in one of the power supplies. The paint is decent, though aging. The chassis and some transformer cases show signs of surface rust. The whole unit weighs about 400 pounds. But you'd have to be crazy to want this thing (which is why I am posting it here <g>). You'd have to be even crazier to pay for shipping but it could be shipped with each chassis in a separate box. The rack is obviously not shippable. With original maintenance manual. As-is. $120 This is the companion TX to the BC-639 receiver (which I do not have).

Military AN/BRA-13A Antenna Tuning Group, Granite State Manufacturing Co., Inc. Contract N0bsr 85493. Includes C-1360/SRT Control/Monitor and CU-714/SRA-29 tuning head (obviously designed to mount at the antenna). The CU-714 has no case and the roller inductor (which is a long flat metal ribbon that spools from one form to another under motorized xontrol) has a broken form. But it does have a nice Jennings

```
  Vacuum variable capacitor with a 10KV rating. Complete (as I have described
  it--there may have been other components). Original. As-is. $65
 Military multimeter. Case says TS-352/U but the meter is labeled ME-9C/U.
  Phaostron Co. Contract AF33(038)-30488. Looks good. As-is. Untested.
  Includes lid and original manual. No accessories. $10
 Military Interconnecting Box J2597/GRC. Decitron Electronics Corp.
  Order #36-039-N-6-28925(E). Original. Like new. Untested. As-is. $5
 Radio Craft Magazine
  These are in excellent condition with covers though the original owner
  sometimes made notes to himself on the cover.
  1933: 1,2,3,4,5,6,7,8,9,10,11: $4 each
  1934: Complete: $48 or $4 each

 INFORMATION NEEDED: Manual copies or any information would be appreciated
 on the following equipment.
  Flesher Corporation TS-170 Terminal Unit
  Military CU-784B/U Antenna Coupler made By Barker & Williamson
  BC-441-D Transmitter/Receiver, Order 26364-Philia-43, Islip Radio
   Manufacturing Corp., Islip, NY
  Military C2698/SRA-22 Control Coupler

 CONTACT: Don Merz, 47 Hazel Drive, Pittsburgh, PA 15228
          412-234-8819 (weekdays, EST)
          Internet: 71333.144@compuserve.com
```

From boatanchors@theporch.com Sat Jan 18 14:34:33 1997
From: Ho4bart@aol.com
Subject: more on "Receivers vs U-Boats"
Message-ID: <970118130438_134487835@emout14.mail.aol.com>

thanks to those who were interested and commented. perhaps i will expand this material & post as an article to tony grogan's ww2 military comm website when it is fully up. meanwhile...... let me add:

1) u-boats required a reliable means of finding prey, not some thing of a fluke nature. the usual method was visual of course, supplemented by hydrophones.   (+ can anyone tell me what kind of range could be expected from hydrophones?)

2) for the "range" of an oscillating receiver, you can probably do the experiment virtually instead of actually. imagine a knight regen rec connected to a longwire ant. what does the oscillating detector run at, 90v at a mA or 2? and, this is not efficiently coupled to the antenna--loose coupling preserved the receiver's selectivity & kept the receiver freq from shifting like the soup in the

ship's pots as the ship rolled. i recall a knightkit "wireless broadcaster" which used a 50C5 at 100v -- even with this beam tube oscillating (at levels higher than a receiver) the input was less than 100mw, and due to the simple capacity coupling to the ant, even a long wire antenna only yielded a range of less than a mile. (is this called "near field radiation" ?)

3) by overbuilt - overpriced radios i actually wanted to single out the scott products such as the SLR (special low radiation) series and the RBO. the RBM at $1000 and the RBB/ RBC at $1500-2100 were certainly high priced, but there's real quality. and i probably really wanted to single out overbuilt entertainment type receivers. for Navy comments on Scott communications receivers vs the mainline sets, there's a 900### series big Navy book on repair notes, modifications, etc. can't cite exact title at moment. it cites gripes by navy radiomen that the scott performance (SLR) was not up to usual Navy standards.

4) the Alaska Steam changeout to sw-3 occurred in late dec 41, jan 42 and the docs i have are records of work done and equipment logs. i would be extremely interested in any information, anecdotes on Alaska Steam or any of its ships!!! I have a SW-5 from the Baranof, "much modified".

5) probably the best reason for low radiation receivers: in a warship environment you have several receivers going at once monitoring dirfferent frequencies. so the receiver that least disturbs its neighbor receivers is ideal in this environment.

6) as Conrad Murray mentioned, U-boats did send, to form up wolf packs and to report convoy positions, sinkings. The twist to this thread is that u-boat HF signalling lead to the demise of many, due to allied decoding success and "Huff Duff" (HF direction finding). a further irony is that the u-boat radar detection receiver "Metox" (name of the French manufacturer, i believe) which hoped to pick up allied aircraft radar (ASB) in the 400 mc/s range, itself radiated strongly (superregen circuit??) and led allied patrol planes to the subs! until the Kriegsmarine finally deduced the cause of their frequent attack from air.

7) in the film "The Boat" circa 1974 is shown a small entertainment/ secondary communication receiver, the R2 or R3 (producer Radione or Nicholas Eltz) in a u-boat. this receiver would probably not pass the stringent USNavy requirements for "low radiation" approval!

thanks for bearing with my ranting on one of my favorite subjects. i solicit any corrections, comments, references. hue miller as KRAB radio used to say, "sideways, into the future!"

From boatanchors@theporch.com Sat Jan 18 20:15:50 1997
From: jproc@bellglobal.com
Subject: RE: more on "Receivers vs U-Boats"
Message-ID: <Chameleon.4.01.2.970118171756.jproc@>

Hue,

   (+ can anyone tell me what
>kind of range could be expected from hydrophones?)

The British 132 hydrophone set of WW2 fame had two ranges - 2500 and 5000 yards. The longer range was used to detect and the shorter range would be used to resolve. Hydrophones were only used on big ships such as cruisers and aircraft carriers. Since they could not outturn a U-boat, there was no point in equipping them with ASDIC. This was the escorts job.

>2) for the "range" of an oscillating receiver, you can probably do
>the experiment virtually instead of actually.

During, WW2, many tramp steamers built in the 1930's were pressed into convoy service. As a result of the depression, their owners did not have enough cash on hand to modernize the ships so they went to sea with their original radio fits. Some of these ships were equipped with the IP500 regen receiver whose oscillations could be picked up for a 100 miles at sea under ideal conditions. (Range increases when receiving in a relatively noise free zone like the North Atlantic). Some one eventually realized that these receivers were emitting RF energy so the order went out that radio silence meant *reception* as well as transmission. I cannot be certain how meaningful this order may have been.

>a further irony is that the u-boat radar detection receiver "Metox"
>(name of the French manufacturer, i believe) which hoped to pick
>up allied aircraft radar (ASB) in the 400 mc/s range, itself radiated
>strongly (superregen circuit??) and led allied patrol planes to the
>subs! until the Kriegsmarine finally deduced the cause of their
>frequent attack from air.

Americans has been using 10 cm radar to locate U-boats. The Metrox receiver, fitted aboard U-boats, was designed to be an early warning device to alert the U-boat commander of an approach by an aircraft fitted with radar. Prior to radar, all aircraft contacts were visual and this provided ample time for the U-boats to dive and escape. With radar, U-boat searching could be conducted during the night and the time advantage for diving was lost. Typically, the aircraft would detect the sub and bear down on it. At some minimum range, a powerful searchlight known as the Leigh light would be turned on to illuminate the target for the final phase of attack. This technique proved so successful that many U-boats did not even get a chance to flood their diving tanks before the attack was upon them. That's the reason why U-boats were fitted with the Metrox.

Later in the war, Americans introduced a 3 cm radar and U boat losses started to increase. The German command could not explain these additional looses. In an effort to forestall the discovery that a shorter wavelength radar was operational, the Americans developed a hoax to deceive the Germans. Through contacts in neutral countries, the Americans led the Germans to believe that the local oscillator in the Metrox receiver was emiiting such a strong signal that it could be picked up by another receiver fitted aboard Allied aircraft. Immediately, a crash program was instigated to redesign the Metrox for 'emission resistance'. After a length of time, the Germans discovered that the Americans were using the improved 3 cm radar and that there was nothing radiating from the Metrox receiver. This deception bought the American many additional months and resulted in higer U boat losses before the Germans finally realized the true reason.

Regards,

Jerry Proc VE3FAB
E-mail: jproc@bellglobal.com
Radio Restoration Volunteer
HMCS Haida Naval Museum
Toronto, Ontario

From boatanchors@theporch.com Sat Jan 18 20:15:50 1997
From: "Bowes, Fr. Bruce" <GBB1@MARISTB.MARIST.EDU>
Subject: Mosley Classic Ant help
Message-ID: <18JAN97.20015932.0038.MUSIC@MARISTB.MARIST.EDU>

Can anybody give me information about the Mosley Classic tribander ant? Do all the elements booms come apart? HOw do you tune it? Does it need to be tuned?
Tnx
Fr Bowes

From boatanchors@theporch.com Sat Jan 18 09:34:13 1997
From: Mike Maloney <ac5p@ionet.net>
Subject: RE: MW Reception
Message-ID: <199701180507.XAA03075@mail.ionet.net>

At 02:40 PM 1/16/97 -0600, you wrote:
>Hello Anchorers.
>I have an oddball boatanchor, Fisher R-200-B Professional, c.1967,
>with LW, MW, SW (7.2-16 Mc), and 49 meter bands, AND of course,
>GLOWFETS.
>Question: Does anyone have a design for an antenna device similar to
>the "Selectantenna" by C. Crane ? Would like to enhance mw reception.
>Appologies for Antenna Query.
>Thanks, Rich P.   dr.electron@juno.com
>
Hi Rich,
The antenna mentioned is a small passive loop. A larger 2 or 3 ft box loop will beat it easy. These were quite popular in the 1920's. You can make one yourself. Serious MW dxers in urban areas use the big box loops for their nulling properties. The most design information is available from: National Radio Club, Publications Center, Ken Chatterton, Mgr.,PO Box 164, Mannsville,NY 13661-0164 Ask for their publications catalog. Send me a LSASE for
details on my ceiling mounted 2 ft box loop for BCB and 160M.
73/Mike   ac5p@ionet.net

From boatanchors@theporch.com Sat Jan 18 09:34:13 1997
From: Bob Roach <KE4QOK@worldnet.att.net>
Subject: Re: Navy surplus??
Message-ID: <19970118032649.AAB18207@LOCALNAME>

At 09:18 PM 1/16/97 +0000, you wrote:

>"DRMO sales" He said they had all kinds of stuff that sold really cheap
>and they were only open to Navy personnel. I just recently gave him

Hi Glenn,

DRMO sales here (and most places I think) are open to the public (although other branches/units of the military gets first dibs on everything). Call your local naval base and ask for the DRMO office and ask them how they handle the disposal of surplus equipment. Here they have counter sales for common/popular items and a sealed bid auction for the rest. THere is a three day viewing period prior to the unsealing of the bids and the rules vary from place to place. when you go to look things over get a copy of the rules and read them VERY carefully. some are a little off the wall or may state responsibilities assumed by bidders.

>My question is....how likely is he to find any Collins gear? Did the Navy
>use the S-line stuff?.. Someone on the ba list once mentioned there

>is still lots of stuff in storage that's just waiting to be disposed. Any
> chance of finding ANY comm's gear at all??

Can't help you here. I used to go to veiw the merchandise back before I became interested in radio so I wasn't paying much attention to that sort of thing.

>Ever since I spoke to him about this I keep having dreams about him
>giving me a call......"Glenn!! I just got a truck load of Collins gear for
>you dirt cheap!"......
>Any comments about this??...What are my chances?

Good luck and let us know how it goes.

```
                                                                 (o   o)
____________________oOO_(  )_OOo_________
73 es TNX
KE4QOK             Real radios glow in the dark.
Bob           Power is no substitute for skill.
              If it stayed up last winter, it was too small.
136 Hermitage Rd.
Newport News, Va. 23606 KE4QOK@worldnet.att.net
(757)930-0348
```

From boatanchors@theporch.com Sat Jan 18 14:34:33 1997
From: w4bld@juno.com (Robert B. Kerby)
Subject: Need Gonset Com IV 6-M book
Message-ID: <19970118.114428.5063.9.W4BLD@juno.com>

That says it. If you can help me, I will gladly pay for xeroxing etc.
Thank, Bob
Robert B. Kerby   -I collect Gonset, Elmac, Lysco, and Morrow-
Post Office Box 991 (UPS ADDRESS: 231 Rosser Avenue)
Waynesboro, VA 22980   (540) 942-4356   w4bld@juno.com
Nets I Frequent: DX-60 @ 1400 Sun. on 7290; Wed. and Sat. nights at
2000 on 3865;
and the AM Swap Net at 1830 on 3885 on Thursday.

From boatanchors@theporch.com Sat Jan 18 14:34:33 1997
From: jcall@sirius.com (Jim Carrington)
Subject: Oops Re: Can anyone ID this?
Message-ID: <199701181755.JAA25503@mail1.sirius.com>

Re: my last post. I should have read a little more carefully. The new 2cnd edition of "SW Radios Past and Present" shows the SR700E but not 700A. I

dont know what the differences were.
                Jim

From boatanchors@theporch.com Sat Jan 18 14:34:33 1997
From: berg stephen erik <z931086@corn.cso.niu.edu>
Subject: Price for R4C?
Message-ID: <Pine.3.89.9701181422.A2791-0100000@corn.cso.niu.edu>

I have a chance to buy a mint Drake R4C receiver with cw filter and calibrator. How much is one of these units worth now?

73,

Steve WA9JML

z931086@corn.cso.niu.edu

From boatanchors@theporch.com Sat Jan 18 14:34:33 1997
From: bdhall@ghg.net (Benjamin D. Hall)
Subject: R-390A queer audio deck problem located
Message-ID: <32E0F473.5B78@GHG.net>

Hello Fellow Follows of the Fine Filament...

Finally got more than five seconds to work around here, so I got down to work on the R-390A audio deck. (The HQ-150 still awaits, I want to clean the workbench before I hoist her onto the bench)

Once again, I'm amazed at the time and trouble this list saves me. At $12 a year, this problem alone saved me enough time to pay for my subscription. I'll be sending my check with a very, very large smile again this year.

Three very nice people wrote back to my initial query, suggesting: 1) miswired back panel jumpers, 2) transformer secondary interactions, 3) something wierd going on with C603, 4) bad grounding. THank you very much for the suggestions!

Well, the jumpers looked good, but I can definatly see that having one of these puppies out of place would mess things up. To see if the secondarys were interacting, I pulled the LINE AUDIO 6AK6, and it didn't help. (well, maybe this wasn't the greatest test of secondary interaction, but I pressed forward) Next, onto C603. Well, the HP 412A showed high ohms on all three sections of this cap, so I was skeptical, but then again, VTVM's sometimes don't tell the whole story when it comes to caps. So, I swapped C603 (nice octal base, easy!) from the Stewart-Warner deck, and wha-la! Problem gone. So, I fired up the HP again and noted that the bad C603 showed high ohms on all three sections, infinite in fact. But one section went off-scale right away without looking like it was charging, hmmm... Well, methinks this cap has lost its cappy-ness. Out came the Fluke 12, and I hooked it up, slapped it into uF measurement mode, and bingo, no capacitance on the first section. 0uF. All the others were 30uF within a few percent... So I'm pretty happy, and the award for correctly diagnosing my problem goes to R-390A "God To Be" Pete Adams, N4KIA... Now to look at how everything is grounded just to be complete...

Next question: I've got the parts to make a new plug in C603 (octal base and three 30 ufd 350 v's) but does anyone have a source for originals?

Thanks and 73,
Ben
--

```
----------------------------------------------------------------------
 From the computer of            | Collector of fine firebottle
 Benjamin D. Hall, Houston Texas | equipment, as well as other things
 BDHall@GHG.net (home) -or-      | involving Earth, Air, Water, and
 Benjamin.D.Hall1@JSC.NASA.gov   | Fire.
---------------------------------------------------------------------
```

PLEASE NOTE MY NEW HOME E-MAIL ADDRESS above. My old address, BDHALL@GHGCorp.com, will still work for a period of time however.

From boatanchors@theporch.com Sat Jan 18 14:34:33 1997
From: k1zat@dsport.com
Subject: R-390A queer audio deck problem located
Message-ID: <Pine.GSO.3.95.970118120128.19927A-100000@puff>

> $12 a year, this problem alone saved me enough time to pay for my
> subscription. I'll be sending my check with a very, very large smile

Talking about which, aren't we coming up to the "renew"
cycle Jack ?

jd

From boatanchors@theporch.com Sat Jan 18 14:34:33 1997
From: "Walter L. Marshall" <wmarshal@CapAccess.org>
Subject: Radiation
Message-ID: <Pine.SUN.3.91-FP.970118103031.4802B-100000@cap1.capaccess.org>

Dear Guys and Gals,
Discussion on radioactivity brings to mind a warning I saw on a 1B3 GT diode box. Seems that some diodes, rectifiers, emit X-rays.

Walter

From boatanchors@theporch.com Sat Jan 18 20:15:50 1997
From: anthonys@ix.netcom.com (-=Tony=-)
Subject: Re: Radiation
Message-ID: <199701182316.PAA23749@dfw-ix1.ix.netcom.com>

~
"Walter L. Marshall" <wmarshal@CapAccess.org> said in BA Digest 1192:
(Date: Sat, 18 Jan 1997 10:33:44 -0500 (EST))
Subject: Radiation

>   Dear Guys and Gals,
>   Discussion on radioactivity brings to mind a
>warning I saw on a 1B3 GT diode box. Seems that
>some diodes, rectifiers, emit X-rays.
>   Walter

Walter, this is very true but the biggest offender was the 6B4G (number from recall) shunt regulator which emitted several times more x-ray. The standard that was set during the late 60's was in the area of 0.5 MR/hr at specific distances. Before that, there was no FTC requirement or even barest of regulation.

The scary part was: TV receiver manufacturers were fighting the market "battle" of brightness and many elevated 2nd anode of CRTs to 27 and up to 30+ KV. This is the beginning V area of very substantial x-emmissions from many components.

During this period, I worked at the leading professional TV monitor maker (Conrac) and I can say that the edict caused a great deal of consternation and careful examination of all the products of which all were HV shunt regulated. "Proofs" had to submitted by well documented reports. All monochrome monitors operated at 20 KV (to obtain desireable brightness) and color monitors were HV regulated to 25 KV (for optimum performance).

Interestingly, the CRTs themselves were not significant xproducers at 25 KV. However, Corning Glass (the leading maker of CRT glass and metal bulbs) did increase lead content. The same was done with the glass of late 1B3s and 6B4Gs.

In our case, the problems were not as difficult to solve because regulator compartments were steel cased as were the assembled units in steel enclosures. Home TV receiver makers had a bigger problem and did back-off on the crazy brightness race and hollow-state tube makers helped much.

Much of the problem disappeared as solid state designs were phased-in during the early to mid 70s.

This all is a just a bit of "old time" history that we hollow-state devotees can appreciate.

-=Tony=-   W6ANV

From boatanchors@theporch.com Sat Jan 18 20:15:50 1997
From: William Donzelli <william@ans.net>
Subject: Re: Radioactive Military Radios
Message-ID: <199701182326.AA26373@interlock.ans.net>

> Here is an updated list of known radioactive military radios, tubes, etc.

The channel selector (telephone rotary dial) on the Navy model TDZ is very hot - so much that it impressed the nuclear science geeks I purchased mine from ("Wow, we should have kept that as a source!"). I think I will try to find a non-radioactive selector and replace it.

Note too that many radar tubes, mostly TR and ATR types, are hot.

William Donzelli
william@ans.net

From boatanchors@theporch.com Sat Jan 18 20:15:50 1997
From: bdhall@ghg.net (Benjamin D. Hall)
Subject: Re: Radioactive Military Radios
Message-ID: <32E160EC.7EAC@GHG.net>

> > Here is an updated list of known radioactive military radios, tubes, etc.

Anyone got numbers on the radioactivity of this stuff? I've been reading these posts with interest... Many of the Geiger counters I played with in high school and college were capabile of going off like crazy on sources of radiation that were way way way below what the govt considers a hazard these days. I wonder just how much radiation these things are emitting.

Anyone know of a place where you can buy them rather inexpensively?

Then again, if my BA's are killing me by radiation, I gotta die of something and death by BA's might not be that bad... I'll have one heck of a collection when I get enough radiation for that to happen so I'll die happy, heh heh heh.

As an interesting aside, I worked at a place that made and refurbed primary nuke reactor cooling water pressure and temperature 'ducers. One of the first things the techs did was get the geiger counter out at the loading dock to see if they were "hot". If "hot", we called the Navy to come and get them for disposal...

73,
Ben
--

```
----------------------------------------------------------------------
 From the computer of            | Collector of fine firebottle
 Benjamin D. Hall, Houston Texas | equipment, as well as other things
 BDHall@GHG.net (home) -or-      | involving Earth, Air, Water, and
 Benjamin.D.Hall1@JSC.NASA.gov   | Fire.
---------------------------------------------------------------------
```

PLEASE NOTE MY NEW HOME E-MAIL ADDRESS above. My old address, BDHALL@GHGCorp.com, will still work for a period of time however.

From boatanchors@theporch.com Sat Jan 18 20:15:50 1997
From: Karan Lee Carruth <klccarru@tenet.edu>
Subject: Re: Radioactive Military Radios
Message-ID: <Pine.OSF.3.91.970118191622.30037C-100000@francis.tenet.edu>

On Sat, 18 Jan 1997, William Donzelli wrote:

> The channel selector (telephone rotary dial) on the Navy model TDZ is
> very hot - so much that it impressed the nuclear science geeks I
> purchased mine from ("Wow, we should have kept that as a source!"). I
> think I will try to find a non-radioactive selector and replace it.

Probably won't hurt you if you don't eat it, sleep with it or carry it around in your pants pocket. The secret with radiation is minimum time, maximum distance.

Lenox, WA5OVG

From boatanchors@theporch.com Sat Jan 18 09:34:13 1997
From: Paul Nelson <drhydro@ames.net>
Subject: Radioactive Military Radios- and other things
Message-ID: <l03010d02af05b5457c87@[1.1.1.1]>

With ref to Lenox Carruth's post on radioactive stuff... some additions and comments

R-390- A Motorola R-390 (non-A) I just got with orig meters exhibits only very minimal activity from the meters. Almost indistinguishable from background.

GRC-9 exhibits none.

Aircraft bubble sextants, type A-10 and A-10A- Fairchild- Common on heavy bombers such as B-17, B-24, B-29- three examples I have exhibit no radioactivity at all.

Norden bombsight, M-9B- no radioactivity.

Astrocompass Mark II- used in a buncha bombers- HIGHLY radioactive around the two luminous markings on the sighting head.

Oxygen regulators-- various manufactures, but Bendix (Pioneer) seem to be the worst- HIGHLY radioactive- any yellowish markings on the dome AND a circular area on the diaphragm.

Be careful of ANY yellowish blob (now mostly turned to a brownish hue, maybe) and DO NOT attempt to remove it! I concur with Lenox's statement- leave it alone, seal it with clear lacquer.

Toggle switches- anything with a little glass tip is radioactive. There were switches made this way, and also clip-on tips for switches which weren't.

Suspect anything. I have (for example) a Japanese type 94 (I think) field receiver... the markings on the knobs make my Geiger counter scream from a couple of inches.... and a number of the markings are gone, making me wonder where they went to over the years this set has been around. Scary.

Us folks what plays with this type of BA stuff (and it all doesn't have to sport RF and hollow-state thingies, IMHO, to be of concern in this venue!)

would be WELL advised to pick up a cheap radiation detector of some sort for our own protection- they're available today for less than a C-note.

```
Paul Nelson W5GNF               "When I go, I want to go quietly, in my
Ames, Iowa                       sleep, like my grandfather- not
                                 screaming, like his passengers."
(DrHydro@ames.net)
                                 "More hay, Trigger?"
 Cessna 140 N77149               "No thanks, Roy, I'm stuffed."
```

From boatanchors@theporch.com Sat Jan 18 09:34:13 1997
From: Robert Nickels <ranickel@mwci.net>
Subject: Ranger cabinet
Message-ID: <32E05E7D.6A49@mwci.net>

Hi all,

I could still use a Ranger cabinet. Condition unimportant.
If the "NIB" Ranger cabinet deal that went down a few weeks ago
produced a surplus cabinet somewhere in BA-land, I'd appreciate
a shot at buying the old one!

Thanks and 73,

Bob W9RAN
ranickel@mwci.net

From boatanchors@theporch.com Sat Jan 18 20:15:50 1997
From: "Gary H. Harmon, Jr." <gharmon@txdirect.net>
Subject: RCA Radiotron Book Purchased
Message-ID: <199701182217.QAA27323@legend.txdirect.net>

I just received a beautiful edition of the large red RCA Radiotron book for my library. It cost me $78.50 shipped but as you know they are scarce and expensive. One place wanted $200 for one with dust covers. The establishment I contatcted has several more. Contact Rainy Day Books, P.O. Box 775, Fitzwilliam, NH 03447-0775, (603) 585-3448, FAX (603) 585-9108.
Super friendly and helpful guy, fast service, and credit cards accepted.

73,
gary

```
<><><><><><><><><><><><><><><><><><><>
<> TOO MANY PROJECTS, NOT ENOUGH TIME <>
<>                                    <>
<>    Gary H. Harmon, Jr., K5JWK      <>
<>        6302 Robin Forest           <>
<>    San Antonio, TX 78239-3218      <>
<>          (210) 657-1549            <>
<>       gharmon@txdirect.net         <>
<>                                    <>
<>PACK & SHIP UNTO OTHERS AS YOU WOULD<>
<>   HAVE THEM PACK & SHIP UNTO YOU   <>
<><><><><><><><><><><><><><><><><><><><>
```

From boatanchors@theporch.com Sat Jan 18 14:34:33 1997
From: provero@connix.com
Subject: RCA USN Receivers
Message-ID: <199701181943.OAA18290@comet.connix.com>

It appears at least some list members revere the early
RCA Navy receivers (RAL, RBA/RBB/RBC, etc) and diss the
later FRR/MRR/SRR series.

The later receivers are not *all* that bad, really. Yes, they are a
pain in the neck to work on, use weird tubes soldered into modules, and
have weak audio. They are also don't drift, and while band-edge to
band-edge calibration isn't so hot their resolution and calibration
after in-band cal is pretty good.

For those who have never seen a FRR/MRR/SRR, there should be an image of
one up on my web pages later today. There are
already stage gain and tube voltage tables.

```
P.J. "Josh" Rovero      home:   provero@connix.com
Meteorologist          radio:   KK1D
Oceanographer           work:   rovero@sonalysts.com
Curmudgeon-at-Large      web:   http://www.connix.com/~provero/
```

From boatanchors@theporch.com Sat Jan 18 14:34:33 1997
From: Randyc3@aol.com
Subject: RE-RE: Receiver Book
Message-ID: <970118112202_714044483@emout04.mail.aol.com>

I had discovered that "Shortwave Receivers Past and Present" was available
on-line at Amazon.com for $9.80, vs. the $19.95 that was in BA posts
recently. I didnt realize that there was a FIRST edition, and that edition
could be what Amazon.com is selling. I have e-mailed Amazon to determine

which edition they are selling, and will post reply. Sorry for the confusion.

From boatanchors@theporch.com Sat Jan 18 14:34:33 1997
From: dlightfoot@sprynet.com
Subject: S(X)-15 and NC-44
Message-ID: <199701181826.KAA08930@m9.sprynet.com>

I have a SX-15 or S-15 (I think they are the same) front panel which was saved from the crusher; it is available to anyone who is in need of it for the cost of the postage. It is in relatively good shape and has all of the pinned dial markings and LOGO's along with the bandspread window bezel.

I picked up a NC-44 from one of our group, Rhyne, in very nice shape, but requires the usual re-capping. The power transformer in it was either added later, or is a replacement, as the whole power supply section seems to have been an afterthought although decently done.
Rhyne
believes this radio was a AC/DC originally because of the grommets isolating the chassis from the rest of the case.
Can someone send me a short description of this beast before I get in trouble!

Thanks .. Deke

Deke Lightfoot K1FT (ex AA6DF) Pepperell, Mass dlightfoot@sprynet.com

---

From boatanchors@theporch.com Sat Jan 18 14:34:33 1997
From: vancleef@netcom.com (Henry van Cleef)
Subject: Re: S(X)-15 and NC-44
Message-ID: <199701181954.MAA04454@netcom6.netcom.com>

As dlightfoot@sprynet.com discourses

>
> I picked up a NC-44 from one of our group, Rhyne, in very
> nice shape, but requires the usual re-capping. The power
> transformer in it was either added later, or is a replacement, as the whole
> power supply section seems to have been an afterthought although decently done.
> Rhyne
> believes this radio was a AC/DC originally because of the
> grommets isolating the chassis from the rest of the case.
> Can someone send me a short description of this beast before I get in trouble!

Since I'm bringing up an NC-46, I've done a bit of research on the NC-44 and 45.

National built and offered AC versions of both the 44 and 45. I don't have any data on the B+ voltage selected, or what was used as an output audio tube, although a 6K6 is "plug-n-play" in a 25L6 circuit. National would not have altered the mechanical construction for the AC-only versions, so the insulating washers, removal of which would have required some non-trivial changes, would have been used, even though not needed.

It's likely that the set you have has one of the three scenarios in its life:

1. Originally constructed as AC-operated by National.
2. Field-reworked using National-supplied (or parts obtained to the National parts list) parts to the National AC-operated configuration.
3. Field-reworked by someone who did their own design.

One thing to look at is the rectifier socket. I assume the set has an 80 in it, which is, I think (not sure) the National Co. configuration. If the socket is a wafer socket, and/or mounted by rivets, it is National Co. work. The AC-DC rectifier was a 25Z5, using a 6-pin socket. Rework to use an 84/6Z4 would be possible---look at the wiring to the plate connections very closely for signs of rework. If the set has a 5Y3 or 6X5 in it, I would suspect that it is a later rework, look for a socket change, screws rather than rivets, and possibly an Amphenol MIP molded socket (preferable for an 80---arcovers on 80 wafer sockets were another form of "the plague" in old sets).

Also, audit the circuits in the set. To change a 300 ma. series-string set from AC-DC to 80 and 250 volts B+ requires providing voltage drops for the 6K8 and IF amplifier screens to put the 6K8 plate, screen, and IF screen at 100 volts, and the 6K8 100 volt feeds MUST be decoupled with a good low impedance AC ground. Look for these.

If it's a neatly-done mod, I'd keep the set that way, even if I had to adjust the 100 volt circuit supplies. If supply has 84 or 6X5, MAKE SURE the B+ current draw is under 70 ma. These tubes handle half the current of a 25Z5/6. While a later 6AX5 will give higher ma., the set doesn't need it, and any rework should aim to keep B+ draw within a reasonable number.

I note that the NC-46 chassis punching has holes punched where a horizontal-mount power transformer could be placed, with rearrangement of the filter choke and audio output transformer. I suspect that the 46 used 44/45 tooling, reworked, and may have been offered by National primarily to use up inventory, so the 44 would likely have been punched for AC-supply configuration from the start.

```
>
> Thanks ..  Deke
>
> Deke Lightfoot  K1FT (ex AA6DF) Pepperell, Mass  dlightfoot@sprynet.com
>


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==================================================================
Hank van Cleef
E-mail vancleef@netcom.com or vancleef@tmn.com
==================================================================




From boatanchors@theporch.com  Sat Jan 18 09:34:13 1997
From: "Garey Barrell, K4OAH" <75025.73@CompuServe.COM>
Subject: Scope Dragging
Message-ID: <970118053203_75025.73_FHD52-3@CompuServe.COM>

Al Fritsche talked about hating the thought of dragging his
scope out of its storage place to use it on the bench.

I have a Tek 2215 that I have had for a few years, and it
sits on one of the computer monitor "floating arm" devices.
The one I have is called a "CRT Valet."  It is mounted on
one end of the bench and allows me to push it back out of
the way when I don't need it, yet easily pull it out and
position it where I want it, without taking any bench surface
area.

Don't guess it would work too well for a "real" scope, like
a 581 or 585A, but maybe a 561 or 400 series.

Just for the record, I reach first for the Triplett 630-NA.
Radio Shack can still order the 30V "hearing aid" battery for
the high ohm ranges.

73, Garey - K4OAH
75025.73@compuserve.com
Atlanta





From boatanchors@theporch.com  Sat Jan 18 09:34:13 1997
From: Bob Roehrig <broehrig@admin.aurora.edu>
Subject: Re: scopes vs VTVMs, etc
```

Message-ID: <Pine.ULT.3.95.970117220344.8384D-100000@admin.aurora.edu>

On Fri, 17 Jan 1997, Richard Hager wrote:

> Reading Bob's comments about learning his trade in a radio shop just
> triggered this observation....
>
> Is it possible that the more experienced among us don't reach for the
> scope first because the first scopes they used were junk?
>
> I mean, all the people that learned troubleshooting -before- 1960 or so,
> were stuck with horrible scopes, like the Eico's, RCA's, Heath O-x etc..

I think that was probably a part of it, Richard. The "best" of the early scopes I owned was an Eico. I wouldn't look twice at one of those now. I don't remember what we had in the shop but it certainly wasn't anything with calibrated anything!

E-mail broehrig@admin.aurora.edu   73 de Bob, K9EUI
CIS: Data / Telecom   Aurora University, Aurora, IL
630-844-4898 Fax 630-844-5530

From boatanchors@theporch.com Sat Jan 18 09:34:13 1997
From: Mike Warren <71555.713@compuserve.com>
Subject: Scopes, meters, brains, et.al. (long)
Message-ID: <199701180919_MC2-F91-B69A@compuserve.com>

Greetings All,

As one of those "old Navy-trained electronics techs" (1958-1978) that someone mentioned, I guess I'll take my turn at the podium on this thread.

First, so you know a little of where I'm coming from, I started a life-long love of electronics in a 9th grade shop class and learned my first radio theory from a 1956 ARRL handbook. The very first purchase I made - ahead of rcvr/xmtr, etc. - was a VOM. I wanted to "prove" that the theory was "right". Although I also later added an old 5" scope, about the only thing I did with it was to watch the DX-100 "modulate". But the VOM helped me build (and get working) kits, homebrew power supplies, transmitters, etc. and it helped me LEARN how circuits worked and how to troubleshoot.

The Navy taught us, like Hank has been teaching us, to LOOK at the circuit (schematic) and to THINK about what is happening or not happening. Then use the meter (and your Mk-I, Mod 2 eyeballs) to find the defective component(s). In Navy Electronics School, we would quiz each other during our night study sessions about "what happens if ...". Navy teaching in those days (1959) fell pretty much along the lines of using analog test equipment (meters, sig gens, etc.) for working on commuications equipment and "digital" test equipment (scopes, pulse gens, etc.) for working on the radar and IFF stuff.

A major factor in what test equipment we had to work with in the 60's (at least for shipboard use) was size and weight. There wasn't a whole lot of room for a shop and test bench setup on a Destroyer, and most of the equipment had to be worked on in place anyway. This usually meant carrying the test equipment to the gear - sometimes up or down ladders at sea while trying to outrun a typhoon. This was not always easy or even safe. I think freq counters in those days were about three feet square and 75 lbs! So, the net result was that we used the VOM, our eyes and our brain for the majority of our repair work and only dragged out the scope when it was necessary.

With the advent of (discrete component) digital circuits in the mid-to-late 60's, this began to change. By that time, I was a CRYPTO maintenance instructor and the first thing I did with a new class of students was to take them into the lab and teach them how to use a triggered scope. We used all the bells and whistles - delayed sweep, intensity modulation, A-B, etc. - and this helped them LEARN what was happening in the circuit so they would be able to ANALYZE what was wrong. Even though the scope was the primary trouble-shooting tool, we still used a meter to isolate the defective component.

But although we were teaching component trouble-shooting, the preferred repair method was beginning to switch from component replacement to board (or module) replacement. This was dictated to some extent by both the complexity of the equipment itself and the test equipment needed to troubleshoot it. Another factor was the physical location of the equipment aboard ship. Trouble-shooting a dead KWR-37 in the middle of a busy Radio Central (with the C.O., Ops Officer, Comm Officer and EMO looking over your shoulder) makes one want to "fix it quick". Logistics played a part as well; do you try to stock (take to sea with you) every tube, coil, transistor, resistor, capacitor, diode, etc. or just stock a spare set of modules and/or boards?

This had it's drawbacks, though. We had one piece of CRYPTO gear that failed fairly frequently (usually after midnight). You had to wake up the Comm Officer and have him get the spares kit out of the safe. Then you replaced the defective board and returned it to the spares kit and returned the spares kit to the safe. Only trouble was, the next night, your spare board is no longer any good. So we wound up trouble-shooting the defective spare (with a meter, because the equipment was always in use) and replacing the defective component. And oh, by the way, the components we used to repair the defective board were usually cannabalized from another defective board because we didn't stock spare components! Some of 'my' (I was a Chief by now) good techs finally resorted to starting a cruise with a set of "un-authorized" spare parts and would not even bother waking up the Comm Officer to get out the spares kit. They just made a few resistance measurements with the trusty VOM and replaced the defective component on the spot.

By the late 70's, test equipment had changed drastically and was much smaller and lighter, but by this time I was "management" so I didn't get much experience with it. I guess my point in all this has been that any test equipment is just a tool to be used to assist and confirm what your eyes and brain tell you.

Well, I've probably taken up more than my share of "podium time" -- thanks for the bandwidth and thanks for listening.

73, Mike W5MAZ (in MN)
m_warren@compuserve.com

PS - So what do I use now for working on our beloved Boat Anchors? Whatever it takes! Triplett VOM; Heath and Eico VTVM's; Heath Grid Dipper; URM-25D and RCA WR-50B Sig Gens; ZM-11/U Bridge; Hickock 600A tube tester; Heath Capacitor Checker; Fluke Differential Volt Meter; TEK 543A scope; and yes, even a modern DMM (which I bought primarily for frequency and capacitance measurement). All of it except the DMM came from estate sales, surplus stores, flea markets, Hamfests or list-members and none of it cost more than $50 (the URM-25D).

From boatanchors@theporch.com Sat Jan 18 20:15:50 1997
From: bdhall@ghg.net (Benjamin D. Hall)
Subject: Re: Scopes, meters, brains, et.al. (long)
Message-ID: <32E15753.6A8E@GHG.net>

Mike Warren wrote:

> The Navy taught us, like Hank has been teaching us, to LOOK at the circuit (schematic) and to THINK about what is happening or not happening. Then use the meter (and your Mk-I, Mod 2 eyeballs) to find the defective component(s).

This is the way I pretty much troubleshoot everything these days thanks to Hank. This afternoon, I finished assembling one of those Ramsey kit 2m radios. Well, at low audio volumes, the thing would work. As I turned up the volume, the signal disappeared. !@$%@$% I said, and I opened the schematic. Well, off the battery was a little voltage regulator that fed +6 to the main chip. Hhhmmm... I wonder if when I turn up the volume, I pull the VR out of regulation, which pulls the local osc off frequency. Hooked up the VOM, and noticed that I was only getting about +3 VDC on the +6 VDC line. Sure enough, a new 9V battery fixed the problem as the one I was using didn't have enough omph.

73,
Ben

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--
----------------------------------------------------------------------
 From the computer of            | Collector of fine firebottle
 Benjamin D. Hall, Houston Texas | equipment, as well as other things
 BDHall@GHG.net (home) -or-      | involving Earth, Air, Water, and
 Benjamin.D.Hall1@JSC.NASA.gov   | Fire.
---------------------------------------------------------------------
```

PLEASE NOTE MY NEW HOME E-MAIL ADDRESS above. My old address, BDHALL@GHGCorp.com, will still work for a period of time however.

From boatanchors@theporch.com Sat Jan 18 09:34:13 1997
From: Bob Roach <KE4QOK@worldnet.att.net>
Subject: Re:Shareware source Radio, Antenna, ect. ect.
Message-ID: <19970118032649.AAE18207@LOCALNAME>

At 02:04 PM 1/17/97 +0000, you wrote:
>I've heard about software for modeling and designing HF center-fed,
>groundplane, wire and other antennas.

Hi Jay,

The following address is a shareware search engine. I used it to find and antenna program called NEC4WIN (try search for NEC4). This program is probably just what you are looking for. I have installed it and looked at it but not had a chance to use it much.

>http://www.shareware.com/

```
                                                       (o   o)
____________________oOO_(  )_OOo_________
73 es TNX
KE4QOK             Real radios glow in the dark.
Bob           Power is no substitute for skill.
              If it stayed up last winter, it was too small.
136 Hermitage Rd.
Newport News, Va. 23606 KE4QOK@worldnet.att.net
(757)930-0348
```

From boatanchors@theporch.com Sat Jan 18 20:15:50 1997
From: "Gary H. Harmon, Jr." <gharmon@txdirect.net>
Subject: Signal Generators
Message-ID: <199701190054.SAA11719@legend.txdirect.net>

Looked at the following today:

H-P rack mount signal generator covers about 50-150 mHz AM/FM.

Marconi rack mount signal generator covers about 10-450 mHz. Big round dial for freq, smaller dial for attenuator.

Both heavy.

Any interest/value/etc?

73,
gary

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<><><><><><><><><><><><><><><><><><><><>
<> TOO MANY PROJECTS, NOT ENOUGH TIME <>
<>                                    <>
<>    Gary H. Harmon, Jr., K5JWK      <>
<>        6302 Robin Forest           <>
<>    San Antonio, TX 78239-3218      <>
<>          (210) 657-1549            <>
<>       gharmon@txdirect.net         <>
<>                                    <>
<>PACK & SHIP UNTO OTHERS AS YOU WOULD<>
<>   HAVE THEM PACK & SHIP UNTO YOU   <>
<><><><><><><><><><><><><><><><><><><><>
```

From boatanchors@theporch.com Sat Jan 18 14:34:33 1997
From: hagelin@magi.com (Richard Brisson)
Subject: Some Ads (Help & Sales)
Message-ID: <199701181709.MAA20996@infoweb.magi.com>

Here are some ads which have appeared recently. The first is relatively more important.

Richard.

###

Ad in this January's Military Trader:

Need someone to work on 2 ANPRC/6 radios. Have new batteries. Tubes
light but no other function. Happy to pay for services. Call
(704)- 782-7248 or write 683 Williamsburg Ct, Concord, NC 28025.
###
eBay Auction Item at:

http://www.ebay.com/aw/item.cgi?item=ijt441185

Hallicrafter S 36A. Does not work. 1940 vintage 45-145? MC. Does
not power up at all. Don't know why. E mail me for picture. Buyer
pays shipping. MO, COD(in US only), or cleared check okay.
Question? Email wj9jrg@utc.campus.mci.net
###
eBay Auction Item at:

http://www.ebay.com/aw/item.cgi?item=ccy973

OLD HAM RECEIVER IN EXC WORKING CONDITION STAR COMPANY LTD,
MODEL SR-700A-SERIAL NUMBER 118-4 FRONT HAS NOISE L,AVC
OFF,FAST,SLOW,BANDS-A,B,C,D,E,-3.5,7,14, 21,28,28.5,29.1,.
PRESELECTOR-3.5,7,14,21,28. HEADPHONE JACK,RF GAIN,AF GAIN,
VFO DIAL,CALABRATOR METER W/ON/OFF SWITCH,
SELECTIVITY 0.5,1.2,2.5,4,KC. BFO SSB,0.5,1.2,2.5,4.
NOTCH 0.5,1.2,2.5,4. FUNCTION STAND BY,AM,LSB,USB,
3.5 MC LSB POWER ON\OFF SWITCH FOUND THIS IN THE ATTIC OF
WWII VET THE WIFE SAID THERE IS A TRANSMITTER BUT HAVEN;T
FOUND IT YET. THIS UNIT WORKS,BUT WHAT IT IS ALL ABOUT
I HAVENT THE FOGGYEST HAVS BEEN UP IN THE ATTIC FOR 30
YEARS BUYER PRE PAYS (MONEY ORDERS ONLY) PLUS SHIPPING
IF ANYONE HAS INFO ON THIS ITEM PLEASE E-MAIL
AT C4JR@AOL.COM
###

From boatanchors@theporch.com Sat Jan 18 14:34:33 1997
From: launerb@crl.com (William H. Launer)
Subject: Superhetrodyne
Message-ID: <v01530501af06ae795202@[192.0.2.1]>

According to the "Radio Handbook" (19th Edition, William I. Orr),
a superhetrodyne receiver is described as follows:

"By changing the frequency of a received signal to a lower, fixed,
intermediate frequency before ultimate detection, high gain and
selectivity may be obtained with a good order of stability. A

receiver that performs this frequency changing (hetrodyning) process is termed a superhetrodyne or superhet receiver."

As we know, some newer receivers convert the incoming signal to a higher (instead of lower) frequency, but the resulting advantages are the same.

73, Bill wb0cld

Bill Launer
St. Charles, MO
launerb@crl.com
wb0cld@wb0cld.ampr.org [44.46.66.25]
qrp-l #279   qrp arci #3551
Grid Square EM48RT

From boatanchors@theporch.com Sat Jan 18 09:34:13 1997
From: Richard Hager <rhager@millcomm.com>
Subject: Re: SW Rx Book
Message-ID: <32E04A8A.2A20@millcomm.com>

Randyc3@aol.com wrote:

> Curious little guy; he keeps on asking why his stereo doesn't glow in
> the dark like daddy's does.--

That =is= curious! Tell us Randy, do you believe this is due to environment or genetics? hee hee...

Man, keep those hv lines covered.

R.

Richard Hager

+ Ah-ha! Design Group, Inc.   -
+ Precision CNC Technology, since 1991 -
+ 612-641-1797, Fax: 612-641-8681   -
+ "I just like to make things" So...   -
+ ...please call Ah-ha! directly for CNC info   -
+ http://www.millcomm.com/~ahha email: ahha@millcomm.com -

From boatanchors@theporch.com Sat Jan 18 09:34:13 1997
From: John Kolb <jlkolb@cts.com>
Subject: Re: SW Rx Book
Message-ID: <Pine.SCO.3.91.970117214804.23249G-100000@sd.cts.com>

On Fri, 17 Jan 1997 Randyc3@aol.com wrote:

> Regarding the new receiver book thread.. Try Amazon.comhttp://www.amazon.com
> Here is their entry-
> "Shortwave Receivers Past and Present"
> Fred J. Osterman; Paperback; @ $9.80 each + shipping
>
> Seems to be a great deal vs. the $19.95 quoted elsewhere.
>

Avery's msg with a couple for sale were for the 2nd ed.
Might these in paperback be the first ed.?

John

From boatanchors@theporch.com Sat Jan 18 09:34:13 1997
From: Jim Garland W8ZR <4CX250B@miavx1.acs.muohio.edu>
Subject: Re: Troubleshooting methodologies
Message-ID: <v03007800af05f462da5d@[134.53.65.12]>

At 10:18 PM -0400 1/17/97, paul Veltman wrote:
>Hi Gang,
>I have one troubleshooting methodology that I NEVER violate. I turn
>everything on the bench off at 10:00 PM (2200 for those of you who
>haven't been assimilated back into the civilian world yet). Every time I
>manage to get into trouble is when I try to push it and get tired.
>
>Paul WA6OKQ

I think that's an excellent practice, Paul. Also, I find by sleeping on a
problem that I'm having trouble diagnosing, the next morning things seem
often to fall into place.
Jim W8ZR

From boatanchors@theporch.com Sat Jan 18 09:34:13 1997
From: John Kolb <jlkolb@cts.com>
Subject: Re: Uses for differential amplifier scope plugin

Message-ID: <Pine.SCO.3.91.970117213313.23249F-100000@sd.cts.com>

On Fri, 17 Jan 1997, Nina West wrote:

> 1. Is it safe to float the ground input of a passive meter (Simpson 260),
> battery-powered meter (DVM), or 2 wire plug VTVM (Heathkit V-7A)?
> For safety sake I would hookup the meter, put power on the unit under
> test, and then read the meter with my hands in pocket.

The VOM's, 260, etc are completely safe. The case is plastic, although on any older meter there may be exposed metal on the test lead tips connected to the wiring. Modern meters have a banana plug competely encased in plastic for safty.

On a VTVM, generally the negetive side of the measurement is connected to the metal case of the VTVM. This can be very dangerous if tied to a point other than ground. Yeah, hands in the pockets, but when the meter starts falling off the bench, instict has the hands out of the pocket grabbing the meter in a flash.

I knocked a coke over on the workbench once - dropped the soldering iron in my haste to try to grab the coke, then picked up the iron by the wrong end grabbing it to keep it from burning anything on the workbench. Ouch - had a VERY large burn before the pain went from the hand to the brain and the drop message came back.

> 2. Hank Vancleef discussed using the CA (which has an A+B) and the 82
> plugins for differential measurements. Wouldn't a differential
> measurement be A-B? Also, on my 82 I see A ONLY, CHOP, ALTERNATE, and B
> ONLY modes. Am I missing something?

You set the scope on A+B, and then yuou find the invert switch for the B channel, making it A + (-B) on the more modern scopes, 465, etc. The "G" plug-in sitting here has A, A - B, and -B positions only.

John

From boatanchors@theporch.com Sat Jan 18 20:15:50 1997
From: Michael Crestohl <mc@shore.net>
Subject: WANTED: Johnson NAVIGATOR transmitter.....
Message-ID: <199701182108.QAA22775@northshore.shore.net>

Hello Everyone:

Anyone got one of these around that they are willing to part with? Cosmetics

are more important that electrical condition. A junker or parts rig would
also be helpful.

73,

```
    .-.                                                               .-.
   /   \           .-.                                 .-.           /   \
  /     \         /   \       .-.     _     .-.       /   \         /     \
-/--Michael Crestohl W1RC ---/---\---/-\---/---\-----/-----\--mc@shore.net-\--
          \     /       \   /     `-'   `-'     \   /       \     /
           \   /         `-'                     `-'         \   /
            `-'                                               `-'
```

From boatanchors@theporch.com Sat Jan 18 14:34:33 1997
From: w4bld@juno.com (Robert B. Kerby)
Subject: WTB Gonset 3158
Message-ID: <19970118.114428.5063.10.W4BLD@juno.com>

Hi Gang - This is an FM receiver with a built-in power supply. It covers
152 - 174 mHz and looks like a G-66 without an "s" meter. THANKS, Bob
Robert B. Kerby   -I collect Gonset, Elmac, Lysco, and Morrow-
Post Office Box 991 (UPS ADDRESS: 231 Rosser Avenue)
Waynesboro, VA 22980   (540) 942-4356   w4bld@juno.com
Nets I Frequent: DX-60 @ 1400 Sun. on 7290; Wed. and Sat. nights at
2000 on 3865;
and the AM Swap Net at 1830 on 3885 on Thursday.

From boatanchors@theporch.com Sat Jan 18 20:15:50 1997
From: "Gary F. Franklin" <103273.1070@CompuServe.COM>
Subject: WTB: 4:1 Reduction Knob for 75A-4
Message-ID: <970118210349_103273.1070_IHH79-1@CompuServe.COM>

Looking for a 4:1 reduction knob and gear assembly for my 75A-4.....

Gary K8BKB

E-Mail: 103272,1070@compuserve.com
616-685-5792

From boatanchors@theporch.com Sat Jan 18 20:15:50 1997
From: "Gary F. Franklin" <103273.1070@CompuServe.COM>
Subject: WTB: Clegg Interceptor B

Message-ID: <970118210844_103273.1070_IHH79-2@CompuServe.COM>

I have a great Clegg Zeus that needs an Interceptor B receiver.... would like to find one which is in good operating and cosmetic condition....

Is there anyone in the SW Michigan, Northern Indiana, Ill or Wi areas operating 6 meter AM? Let me know if you are!

Thanks

Gary K8BKB

E-Mail: 103273,1070@compuserve.com
616-685-5792

From boatanchors@theporch.com Sat Jan 18 09:34:13 1997
From: w2ec@VNET.IBM.COM
Subject: WTB: 50kc-100kc coil for HRO-M
Message-ID: <199701180243.UAA29831@uro.theporch.com>

Just received my HRO-M today and it sure is nice. Only coil I'm missing is the 50kc-100kc, black wrinkle paint to match the others. I'd take a grey one also if no black ones show up. I guess they fit the HRO-5 as well,

Also, I could use two of the metal frames that attach to the coil face plate for holding the logging cards. The graphs are all there and near perfect, but two coils are missing the right hand side scale frame/plastic for the logging scale.

Finally, I don't have any coil boxes for the coils. Anybody have spare coil boxes? Didn't think so. How about a picture of what one looks like and the dimensions so I could build my own, either three coil or five coil box? And if there is some really trusting soul out there, would you consider sending me a box that I could photograph and blueprint so that I could make my own (and return yours, of course!).

73, Ray W2EC w2ec@vnet.ibm.com

From boatanchors@theporch.com Sat Jan 18 09:34:13 1997
From: Mike Maloney <ac5p@ionet.net>
Subject: WTB: Drake R4B-R4C
Message-ID: <199701180254.UAA04377@mail.ionet.net>

Hello BA Gang,
Anyone have a good clean R4B or R4C (fully filtered R4C?) not being used?

Having sold my 51J4, I am looking for top receiver for CW and will give it a good home. Thanks for your interest.
73/Mike ac5p@ionet.net

From boatanchors@theporch.com Sat Jan 18 14:34:33 1997
From: Ho4bart@aol.com
Subject: Re: WWII Jap set. ID
Message-ID: <970118110251_913031806@emout08.mail.aol.com>

In a message dated 97-01-17 16:22:10 EST, rdkeys@csemail.cropsci.ncsu.edu writes:

<< Your little Japanese rig sounds like the panpack vhf set that used
 the clone of the type 19 tube. It covered about 60-70mhz or so and >>

sounds like the 94-6 set with the single tube and the cw (actually, A2) button on the side. freq range about 27-50 mc/s. actually, the antenna is a kind of ground plane, one pole goes straight out & the other straight up. real handy for running thru the jungle. the circuit is reminiscent of the "5 meter" walkie talkies in for example the Frank Jones Radio Handbook of 1937 or so. btw, this radio has the highest radium count of any radio i have ever metered. as john nelson aa7w sez, "it must have glowed like crazy in the dark!"   hue miller

---

From boatanchors@theporch.com Sat Jan 18 20:15:50 1997
From: Richard Hager <rhager@millcomm.com>
Subject: Re: WWII Jap set. ID
Message-ID: <32E1628A.65A1@millcomm.com>

Ho4bart@aol.com wrote:

> btw, this radio has the highest radium count of
> any radio i have ever metered. as john nelson aa7w sez, "it must have
> glowed like crazy in the dark!"   hue miller--

While radium was certainly used for some dials, another element has been much more commonly used. "Tritium" is the name I think, and if I remember correctly, it runs around $200,000 per gram or per ounce.

So if you have a -lot- of old dials, you might want to cash 'em in!

PS: Someone was asking about bidding at DRMO sales. Someone else wrote back to read the rules very carefully. That's real good advice. In many cases, the instant you take title, -you- are legally -responsible-, including meeting any rules regarding environmental hazards including PCB's in caps and xformers and radioactive items like meter faces.

This can get horrendously expensive in a real hurry if someone decides to nail you to the wall on it. There're good reasons why many commercial outfits do not bid on certain pieces of equipment. Be careful what you sign....

R.

Richard Hager

+ Ah-ha! Design Group, Inc.   -
+ Precision CNC Technology, since 1991 -
+ 612-641-1797, Fax: 612-641-8681   -
+ "I just like to make things" So...   -
+ ...please call Ah-ha! directly for CNC info   -
+ http://www.millcomm.com/~ahha email: ahha@millcomm.com -

From boatanchors@theporch.com Sat Jan 18 20:15:50 1997
From: Karan Lee Carruth <klccarru@tenet.edu>
Subject: Re: WWII Jap set. ID
Message-ID: <Pine.OSF.3.91.970118192058.30037E-100000@francis.tenet.edu>

On Sat, 18 Jan 1997, Richard Hager wrote:

> While radium was certainly used for some dials, another element
> has been much more commonly used. "Tritium" is the name I think, and if
> I remember correctly, it runs around $200,000 per gram or per ounce.

Tritium is relatively modern. Only been used for the last ten or fifteen years. It is sealed in glass vials. Radium is far more dangerous as it has been used for sixty years or so without any real attempts at protection. Even civilian watches of the 40s and 50s are HOT.

BAers are not likely to run into tritium but radium is everywhere. The real problem is that it is just painted on dial faces, switches, panel markings, instrument faces, etc. It can be scraped off, sanded off, removed with paint remover when you refinish a panel, etc. That's when it gets dangerous. Unless you spend a long time in front of radioactive radios they won't be a danger to you if you observe the simple safety rules we have discussed.

Lenox, WA5OVG